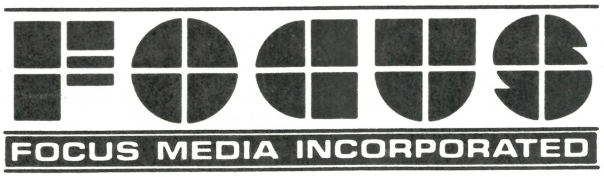
WHO AM I?

Teacher's Lesson Planner

Birds, Trees, and Flowers
Mammals, Reptiles, and Insects
Plants and Animals of the Desert
Ocean Life
Animals of the Past

FOCUS
FOCUS MEDIA INCORPORATED

T025



Producers
Helene Karo
Mary McAllister Salvia

Content
Frederick Burggraf
David L. Gray
William Piervincenzi

Educational Consultants
Alan R. Pomponio
Professor Carleton Phillips, Ph.D

Teacher's Lesson Planner

Authors/Editors
Frederick Burggraf
Helene Karo
Mary McAllister Salvia
Morton Rosen
Judith J. Waite

© 1986, 1987, 1989 by Focus Media, Inc. • 839 Stewart Avenue • Garden City • NY 11530
(516) 794-8900 • (800) 645-8989

Who Am I?

Table of Contents

Teacher's Guide

Introduction 1
Educational Objectives 1
Program Description 1
Scoring 2
Using the Editor 3
Strategies for Classroom Use 5
Key to Organisms 7
Time Line—Animals of the Past 14
Answer Keys 16

Student Workbook

Introduction 20
Clue Sheet 21
Birds, Trees, and Flowers
- Crossword Puzzle 1 22
- Crossword Puzzle 2 23
- Word Search Puzzle 24
- Glossary 25

Mammals, Reptiles, and Insects
- Crossword Puzzle 1 27
- Crossword Puzzle 2 28
- Word Search Puzzle 29
- Glossary 30

Plants and Animals of the Desert
- Crossword Puzzle 1 32
- Crossword Puzzle 2 33
- Word Search Puzzle 34
- Glossary 35

Ocean Life
- Crossword Puzzle 38
- Size Places 39
- What's for Dinner? 39
- What's Different? 40
- Glossary 41

Animals of the Past
- Crossword Puzzle 45
- Fact Finder 46
- What's Different? 47
- Pronunciation Key 49
- Glossary 50

Apple Computer, Inc. makes no warranties, either expressed or implied, regarding the enclosed computer software package, its merchantability or its fitness for any particular purpose. The exclusion of implied warranties is not permitted by some states. The above exclusion may not apply to you. This warranty provides you with specific legal rights. There may be other rights which you may have which vary from state to state.

Introduction

Welcome to the *Who Am I?* programs. These five computer programs and their accompanying support materials will introduce your students to the exciting world of nature now and in the past. They are as follows:

- *Birds, Trees, and Flowers*
- *Mammals, Reptiles, and Insects*
- *Plants and Animals of the Desert*
- *Ocean Life*
- *Animals of the Past*

This package provides a unique way of stimulating students' curiosity. The computer "pretends" to be certain organisms, and students must request clues and review pictures in order to discover the names of the plants or animals that the computer is pretending to be.

By pressing a single key from a menu (listing) of clue choices, students will be able to gather the information they think will be most helpful about the organisms, and ultimately to identify them.

There are two levels of clue difficulty from which the students can choose. Level One may prove suitable for the lower grade levels, while Level Two may be more appropriate for advanced students as well as for enrichment in the lower grades.

As a learning tool, *Who Am I?* operates on two levels. The first and most obvious level is that of simple identification; the student accumulates information about an organism and uses it to arrive at a conclusion. Throughout this process, the student may choose information about such things as the color, size, habitat, and classification of a particular organism.

On a deeper level, the student is exposed to processes that require selective and highly deductive thinking. Because the student is encouraged to identify an organism using as few clues as possible, he/she must think critically and evaluate the information carefully in order to minimize the number of clues used. In some cases, the organisms may be identified with only a few facts. In other cases, many facts may have to be uncovered in order to distinguish between different plants and animals. The careful choice of clues and analysis of the information thus gathered are important features of this program; they serve to foster discriminatory and analytical thinking.

Since student performance is evaluated by points, the student can rerun the program several times in pursuit of a higher score.

An easy-to-use editing feature is provided within the program which will allow you to change the clues for any organism. You may thus make clues easier or more difficult depending on your students' abilities.

Educational Objectives

Who Am I? is an exciting addition to a science and nature curriculum. The program is ideally suited for reviewing and expanding background information about organisms, present and past, and the game-like nature of the program maintains a high interest level.

As a result of using the *Who Am I?* programs and supporting materials, students will

- identify plants or animals by their characteristics,
- identify plants or animals by their pictures,
- recognize similarities and differences among plants or animals,
- classify organisms according to their physical characteristics, habitat, or era,
- develop new vocabulary,
- be encouraged to study further in order to expand their knowledge of plants or animals.

Program Description

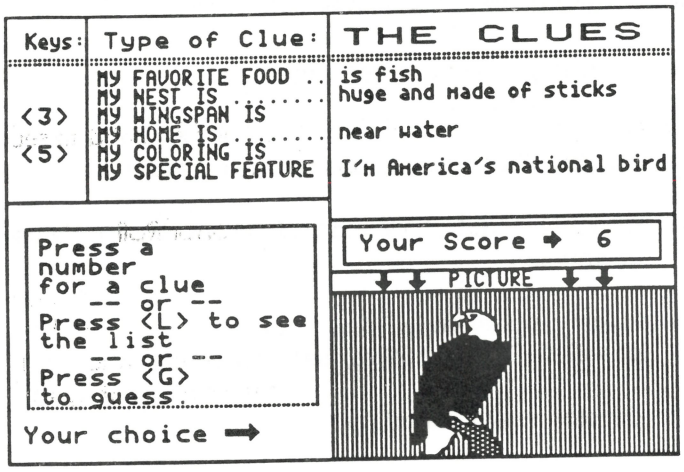
With each of the *Who Am I?* programs you will receive one computer disk, as well as a back-up disk. The disk contains the program in an editable form (see "Using the Editor" on page 3 of this manual).

The disk has two sides. Only Side A of each disk will boot. As you use the program, the computer will give you instructions as to when to turn the disk.

The *Who Am I?* disks for *Birds, Trees, and Flowers, Mammals, Reptiles, and Insects,* and *Plants and Animals of the Desert* contain a total of 30 organisms per disk. *Ocean Life* and *Animals of the Past* each contain 40 organisms. Each disk also contains clues and a picture for each organism. When the program begins, the student will be asked to enter his/her name. Next, the student can choose to see the rules of the game. The student is then given the choice of which level of difficulty he/she wishes, and whether to play the game with or without sound. Finally, the identification process begins with a display of choices that allows the student to examine clues to the identity of the plant or animal.

Clues Menu

The following illustration is a sample of the clue choices available to the student during the game.



For the sake of clarity, the text of each clue choice will be referred to in the rest of this manual as a clue stem. When the user chooses a particular clue, the stem will be completed with the applicable information. An organism may have as many as seven clues.

Choices <1> through <7> will provide the student with information about the organism's characteristics. Pressing the <P> key will cause a picture of the plant or animal to be displayed. See "Scoring" in the next column.

When the student is ready to name the organism, the <G> key must be pressed. At that time, depending on the level of play chosen, the student will be asked either to answer a multiple-choice question or to type the name of the organism, and then press RETURN. If the answer is correct, the word "correct" flashes, the picture is displayed, and points are awarded. If the answer is incorrect, points are deducted from the score, and the student is directed to press the space bar to continue the game. The round will not end until the student has either guessed correctly or has tried all the clues. Since *Who Am I?* is not a timed program, students should be encouraged to consider all clues carefully.

Note

Genus and species names cannot be underlined or entered in italic type in the program, as is normally done when scientific names of species are written or printed. You may wish to discuss this with your students, since they may see genus and species names printed in italic type in the Student Workbook.

At the end of each question, the student is asked if he/she wants to play again. If a positive answer is given, another mystery organism is displayed.

Scoring

The object of the program is to identify each plant or animal using as few clues as necessary and thus to finish the game with the highest score possible. Each time clues are requested by the student or an incorrect guess is made, points are deducted from his/her score. Each text clue costs one point. The differences in scoring are described below.

Level One

Students begin the game with 20 points. After four text clues are chosen, the student may elect to see a picture at a cost of 10 points. Correct answers are awarded 20 points at this level. An incorrect guess costs a student one-third of his/her points. There is an additional option for players on Level One. They may press <L> to see a list of the four possible choices for the answer. This is a review option and has no point penalty.

Level Two

Students playing *Who Am I?* at Level Two will begin the game with 30 points. They may see the picture clue (at a cost of 15 points) only after all text clues have been chosen. Correct guesses are awarded 30 points. An incorrect guess at this level costs a student one-half of his/her points. The list option is not available at Level Two.

If a student's score drops to zero, the correct answer is given, and the student is asked if he/she wants to play again. There are 30 or 40 organisms on the disk. At the end of the 30th or 40th round, the game will automatically end.

A special randomizing feature in the program insures that both organisms and the clues for each organism appear in an unpredictable order. Because of this, the sequence cannot be used as a basis for identification, and students will face a new challenge each time the program is used.

The Honor Roll

The Honor Roll is a special screen that lists the names of students with the top ten scores for the game. If the student's score falls within or above the range of scores on the Honor Roll, his/her name will automatically be added to this list. A student's name will be saved only if he/she presses the space bar after viewing the Honor Roll. The teacher has the option of making changes on this screen (see the section on the Honor Roll Fixer).

Because of the differences in scoring at the two levels, a student playing at Level Two may have a better chance of making the Honor Roll than a student playing at Level One. Since a back-up disk is included with this learning package, you may wish to use a different disk for each level.

Using the Editor

Using the editing feature to customize the *Who Am I?* programs is as easy as using the programs themselves. Select the program that you wish to modify, and simply boot Side A of that disk. The program will ask you to type your name. Enter the password "REWRITE" at this point. You will then be asked:

Which would you like to do?

1. work with the Honor Roll Fixer, or
2. work with the Files?

Press the number of your choice:

Each of these options is explained in detail in the next column.

The Honor Roll Fixer

There may be times when you would like to change the Honor Roll or completely reset it. Using the password described in the previous paragraph and choosing the first option will access the following menu:

```
HONOR ROLL FIXER
With this program, you can do the
following:

1. See the HONOR ROLL.
2. Delete a name from the HONOR ROLL.
3. Modify a name on the HONOR ROLL.
4. Reset the entire HONOR ROLL.
5. Make no changes, return to program.

Type the number of your choice. ➡
```

The on-screen directions given when you choose any of the options in the above screen are self-explanatory. Below is a brief description of each option.

See the Honor Roll

This will allow you to inspect the Honor Roll and to see each player's level of achievement.

Delete a Name From the Honor Roll

Perhaps a student has been on the top of the Honor Roll for a long time, and you wish to retire him/her. Following the directions in this menu choice will remove the name(s) and move all names below it up one position.

Modify a Name On the Honor Roll

This option might be used if, for example, two students have the same first name, and you wished to add middle or last names to distinguish their scores.

Note

If you choose either the "Delete" or "Modify" options and decide you do not want to make a change, press any number and then RETURN. You will get a message that tells you to press ESCAPE to return to the main menu. You can do this without making any changes to the Honor Roll.

Reset the Entire Honor Roll

At the end of the year you may wish to remove all names from the Honor Roll. You may do this by using this option.

Make No Changes, Return to Program

This choice allows you to look at the options on the Honor Roll without making any changes. **If changes have been made to the Honor Roll, option <5> will change to say, "Save changes and return to program." If you have made any changes to the Honor Roll, they will be saved on the disk only when you choose this option.**

Working with the Files

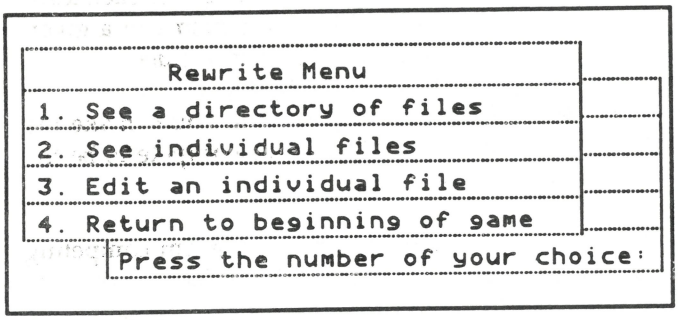
This option allows you to change any of the text clues for any organism in a program. To use this option, simply boot Side A of the disk, then type "REWRITE" when you are asked to enter your name. You will then be asked:

Which would you like to do?

1. work with the Honor Roll Fixer, or
2. work with the Files?

Press the number of your choice:

After choosing option 2, you will be directed to turn the disk over and press the space bar. This will yield the following menu:


Rewrite Menu
1. See a directory of files
2. See individual files
3. Edit an individual file
4. Return to beginning of game
Press the number of your choice:

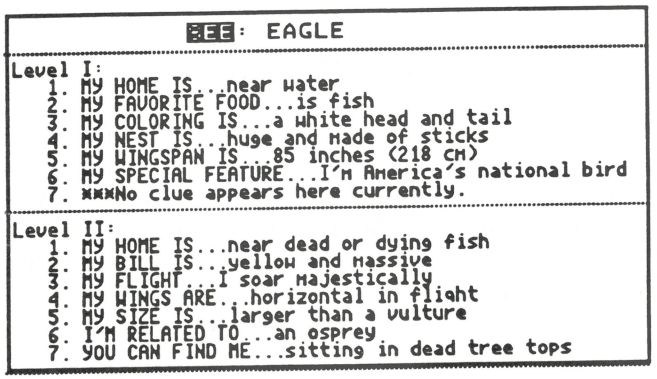
See a Directory of Files

This selection will display a listing of all the files (organisms) contained on the disk you are using. Pressing the space bar at this screen will allow you to see all screen pages of this list.

Pressing ESCAPE at this screen will return you to the Rewrite Menu.

See Individual Files

When a file (organism) is selected and RETURN is pressed, the program will display the complete file of information for both levels for that organism. For example, if "eagle" had been chosen from the listing of organisms on the disk, the program would advance to the following display:


SEE: EAGLE
Level I:
1. MY HOME IS...near water
2. MY FAVORITE FOOD...is fish
3. MY COLORING IS...a white head and tail
4. MY NEST IS...huge and made of sticks
5. MY WINGSPAN IS...85 inches (218 cm)
6. MY SPECIAL FEATURE...I'm America's national bird
7. xxxNo clue appears here currently.
Level II:
1. MY HOME IS...near dead or dying fish
2. MY BILL IS...yellow and massive
3. MY FLIGHT...I soar majestically
4. MY WINGS ARE...horizontal in flight
5. MY SIZE IS...larger than a vulture
6. I'M RELATED TO...an osprey
7. YOU CAN FIND ME...sitting in dead tree tops

At this screen you may also "page" through the files by using the arrow keys. Pressing the ESCAPE key will return the program to the listing so that you may choose to see a different file. When you have seen as many as you wish to see, pressing ESCAPE at the listing screen will return you to the Rewrite Menu.

Edit an Individual File

If you wish to change some of the clues to make them easier or more difficult, option 3 is the one to choose. The listing of all organisms will appear first. From this list you will choose the one you wish to edit. Next, all clue information for that organism will appear, and screen directions will prompt you to indicate which particular clue you wish to change. If at this point you have changed your mind about editing the file, you may return to the Rewrite Menu by pressing ESCAPE.

If you choose a clue to edit, a new screen will display the complete clue as it currently appears on the clue choices screen in the program. You will then be prompted to type the new information for the clue stem. Since there are space limitations in the program itself (19 characters and/or spaces for the clue stems; 27 characters/spaces for the clue itself), directions on this

screen will indicate how many characters and/or spaces you may enter. You may use the <-- and/or DELETE keys to delete and retype as much as you wish until your new clue is exactly the way you want it. When you finish typing the clue stem, press RETURN, and the clue itself will display. If you press RETURN without typing, the clue stem information will remain the same, and the clue will be displayed. You will be prompted by the computer to edit the clue in the same manner in which you edited the clue stem. You may press the CONTROL and D keys simultaneously to delete the clue from the file.

Note

Genus and species names cannot be underlined or entered in italic type in the program, as is normally done when scientific names of species are written or printed. You may wish to discuss this with your students, since they may see genus and species names printed in italic type in the Student Workbook.

Caution STOP

When choosing clues to delete, select carefully. You will only be allowed to delete clues as long as four complete clues remain. This is designed as a safety feature as the program will not operate without at least four clues for each item. When you have deleted a clue, the message, "***No clue appears here currently," is displayed on the screen.

You may type new information for a previously deleted clue by selecting the deleted clue to edit. Deleted clues do not affect the operation of the program.

When editing a given clue, it is important to note that the new information you enter will appear in the program exactly as you type it. This means that you must include any end punctuation you wish to see in the identification part of the program. On the eagle file, for example, if you were editing the clue which begins, "MY FAVORITE FOOD...," you would probably want to end your entry with a period so that a complete sentence would result: "I EAT...fish."

When you finish editing a clue stem and clue, you are returned to the previous screen where the clue as you have rewritten it will be displayed. You are then allowed to choose another clue to edit.

Checking Your Work

When you have finished editing the clues in a particular file, you are directed to press the * key. At that time you are told to check your work carefully for errors. You are then given the options of either making changes or corrections to your work or saving your work on the program disk itself.

Finally, when you have saved the new information, you are returned to the Rewrite Menu. To return to the beginning of the game, select option 4.

Strategies for Classroom Use

Using the *Who Am I?* programs either with individuals, small groups, or an entire class will familiarize students with the characteristics of organisms past and present and their classifications. Demonstrating the program to an entire class is a good way of acquainting students with the types of clues they will need to use for identification of the organisms, and will prepare them to make carefully considered choices.

Below are suggestions for using the *Who Am I?* programs and for integrating it into your science and nature curriculum:

1. As a class activity, students could be divided into two competing teams. The object would be for each team to identify the largest number of organisms in a given period of time with a minimum number of clues.

2. As an alternative class activity, you could make the clue selections and have the students compete to be the first to guess the organism.

3. Students in pairs could use the program competing with one another to guess the organisms.

4. Students could begin using the program without any teacher input to allow them to develop their own learning strategies. Allowing students to work individually will enable them to play at their own levels of competence.

5. Students working individually might enjoy charting their own progress and trying to raise their scores, thus improving their standing on the Honor Roll.

6. As students use the program, have them list the organisms. They can then categorize the organisms according to type where possible, e.g., dolphin-mammal, shark-fish, oyster-mollusk, giant kelp-algae. Students working with the *Animals of the Past* disk could use the time line provided on pages 14 and 15 of this Teacher's Guide to help them categorize animals according to periods and eras.

7. You could reproduce student worksheets and crossword puzzles so that students may fill in the answers while playing the *Who Am I?* game. This offers an opportunity for a kind of notetaking experience for students.

8. While using the program, a student should be encouraged to keep a log of new, unfamiliar, and/or key vocabulary. He/she could then use the glossaries provided in the Student Workbook or a dictionary to find definitions for these words.

Off-Computer Activities

The following activities and suggestions are intended to assist you in developing in-class and homework assignments related to your use of the program.

Birds, Trees, and Flowers
Mammals, Reptiles, and Insects
Plants and Animals of the Desert

1. Individual students may write additional clues about the organisms that they studied in the *Who Am I?* programs, and then see if any class members can match the clues with the organisms.

2. Students can make scrapbooks about the organisms in the programs. They can include pictures that they either draw, clip from magazines, or photocopy.

3. Have each student do research on one animal or plant not found in the program. The student may then fill in his/her own clues on the worksheet provided in the Student Workbook section of this manual. After this is completed, the sheets may be displayed around the classroom or on a special bulletin board. You may conduct a class session in which each student has a chance to read his/her worksheet in front of the class and see how long it takes for the class to guess the name of the organism.

4. Students may fold several sheets of colored paper into book form and draw a picture of an animal, plant, tree, or bird on the cover of the booklet. Then they may write a story or poem about their choice, remembering to include facts learned from *Who Am I?*

5. Students may work together and make an entire book including stories, poems, and pictures as a class project.

6. To enhance "real life" experience, the teacher can plan a visit to a local zoo, nature museum, nature preserve, etc. Provide the class with copies of the clue worksheets and have them write clues for a favorite animal, plant or tree.

Ocean Life

1. In doing research assignments, students may be encouraged to find information about a single life form, a group of plants or animals, or a specific water habitat. A specific habitat may be a polar environment, a tropical environment, a coral reef, a pond, etc. Goals for a finished research activity could include:

   a. a well organized set of notes
   b. a list of main ideas
   c. an outline
   d. a comprehensive report
   e. various computer presentations

2. Have students start a shell collection in which they identify and classify each type of mollusk.

3. Have students research and chart a food chain using the plants and animals in this program. Student can be asked to identify plants, animals, predators, and scavengers.

4. Have students design an aquarium. Include plants and sea animals that would get along with each other.

5. Students can make mobiles that classify different marine organisms, using hanger, oak tag, and string.

6. To encourage problem solving, invite students to choose one of the life forms and redesign it so that it is better suited or adapted to live in its environment. Then redesign the same creature to live in an environment different from its own.

7. Have students discuss and write about the human role in the aquatic food chain. Can humans be helpful and/or harmful to aquatic life? Why do some people want to save whales? Which ocean animals are extinct and which ones are endangered?

8. If it is possible, a visit to a local aquarium or a natural aquatic environment would reinforce concepts learned through the *Ocean Life* program. Also a call to a nearby museum, college, or university might bring a resource person to your school to talk to your students.

Federal and state agencies in your area may also be helpful with resource materials and expert personnel.

Animals of the Past

1. When studying life forms of the past, a trip to a museum or university where fossils may be observed first hand would be an exciting activity. If such a facility is not conveniently located near your school, you may call the nearest college or your state education department to determine if there are any traveling exhibits or speakers available in your area.

2. Students should be encouraged to create time lines which include animals mentioned in the program and the eras in which they lived. Additional research will allow students to add the names of animals other than the ones included in this program.

3. Creative writing could be encouraged, using poetry, prose, and journalism styles. You could select titles which motivate the students to begin writing. Such titles may include, "A Day In The Life Of_____," or "My Pet Dimetrodon." Create a front page for a newspaper announcing the beginning of a new era.

4. Students may be assigned the task of identifying categories of animals (reptiles, amphibians, mammals, etc.), identifying the animals' characteristics, and then illustrating their research. The information may be recorded in traditional narrative reports, charts, outlines, or on student-prepared computer programs.

5. This area of study lends itself well to the activity of constructing dioramas and models. Models may be constructed of clay, paper, or any other convenient medium. Dioramas and models offer a good math experience if the students are encouraged to choose a scale to follow. A student may choose to make a model in the scale of 1 inch = 1 foot and then discover that the model will be too large. The student might then have to re-evaluate the scale size.

6. Using the talents of specific students and/or the cooperation of a music teacher, the individual or group of students may compose a simple short piece of music to represent specific life forms. The composite pieces may then be performed as a "Dinosaur Suite" or a concert to "Rock Around the Geologic Clock."

7. Have students draw, trace, or cut out pictures of the animals who lived long ago. Students should then put each picture onto an index card that tells how long the animal was. Students then measure a piece of string the same length as the size of the animal and attach the string to the picture card. This activity would allow students to get a clearer idea of just how large or small some of these organisms were.

Key to Organisms

There are two levels of difficulty in the *Who Am I?* programs, as explained in the introduction of this lesson planner. In order to help students who may be having trouble identifying an organism, the following is a complete list of the plants or animals found on each of the five program disks, along with a clue for each of the difficulty levels. Level One clues appear directly beneath the name of the animal in regular type. Level Two clues appear next in italicized type.

Birds, Trees, and Flowers

Eagle
My home is: near water
My home is: near dead or dying fish

Vulture
My size is: 32 inches (82 cm)
My head is: naked

Owl
My size is: 21 inches (53 cm)
My head: has eartufts

Robin
My size is: 10 inches (25 cm)
My feet are: grasping

Hummingbird
My size: I'm the smallest of birds
My bill is: long and needle-like

Woodpecker
My size is: 10 inches (25 cm)
My feet are: zygodactyl

Gull
My coloring is: white and gray
My feeding habits: I'm a scavenger

Mallard
My family is: waterfowl
My family is: surface feeders (dabblers)

Sparrow
My bill is: used for cracking seeds
My bill is: conical

Hawk
My home: open country, woodland
My food: rodents

Walnut
My height is: up to 100 feet (30 m)
My leaves are: compound—9 to 23 leaflets

Oak
My height is: 70 ft. (22 m)
My leaves are: alternate and simple

Maple
My height is: 100 feet (30 m)
I'm used as: an ornamental

Pine
My fruit is: a cone
My fruit is: a cone

Cedar
My leaves are: overlapping scales
My leaves are: scaly and blunt

Willow
My height is: 50 feet (16 m)
My flowers are: loose catkins

Spruce
My color is: blue-gray
My wood is: valuable timber

Palm
My leaves are: very narrow and thin
My leaves are: parallel-veined

Sycamore
My height is: 175 feet (53 m)
My leaves: are large and star-shaped

Beech
My height is: 125 feet (39 m)
My fruit is: a triangular nut

Tulip
My special feature: look for me in Holland
My flowers: have 6 petals

Morning Glory
My stems are: a twisted vine
I grow on: a twining, hairy stem

Buttercup
My color is: bright yellow
My stems are: hollow, hairy, branched

Dandelion
My home is: in lawns and fields
My stalk is: a hollow, milky stem

Daisy
My shape is: round with petals
My shape is: a disk with many rays

Rose
I make my home: in yards and gardens
My leaves: have 5 toothed leaflets

Violet
My special feature: is my nice fragrance
My leaf is: heart-shaped

Goldenrod
My color is: yellow
State flower: Kentucky and Nebraska

Iris
I grow: in flower gardens
My petals are: called 'standards'

Lily
I am popular: at Easter
My relatives are: onions and hyacinths

Mammals, Reptiles, and Insects

Beaver
My home is: streams and lakes
My fur is: brown in color

Deer
My size is: 7 feet (2.2 m)
My color is: reddish-brown in summer

Bear
My color is: white, brown, or black
Mystery clue: I am carnivorous

Fox
My tail is: bushy
My habits are: mostly nocturnal

Rabbit
My ears: are long
My special feature: long hind legs

Mouse
My size is: like a gerbil
My favorite foods: nuts, seeds, and insects

Opossum
My size is: like a house cat
My habits: are nocturnal

Porpoise
My home is: in the ocean
My habitat is: all oceans

Bat
My favorite food: is insects
My favorite food: is fruit or insects

Squirrel
My favorite foods: are seeds and nuts
My size is: 12 inches (30 cm)

Raccoon
My size is: like a small dog
My habits: are mainly nocturnal

Rattlesnake
My size is: 6 feet (182 cm)
My tail: warns attackers

Turtle
My home is: on land or in the water
My habitat is: terrestrial

Alligator
You can find me: in swamps and streams
My head has: powerful jaws, broad snout

Crocodile
You can find me: in and near water
My favorite food: large animals

Lizard
My favorite food: is insects
I am active: during the daytime

Tortoise
My home: is on land only
My habitat: is terrestrial

Chameleon
My favorite food: is insects
My habitat: is trees

Ant
I live: in colonies
My life: is social

Bee
My colors are: black and yellow
My larvae: are in a tunnel

Wasp
My larvae: are usually in a nest
My wings: are made of membranes

Beetle
You can find me: usually on land
I chew: with heavy mandibles

Dragonfly
My home: is near water
My wings: are held horizontally

Damselfly
My size is: smaller than a dragonfly
My wings: are held vertically

Butterfly
My wings: are large and colorful
My wings: are scaly

Moth
You can find me: at night
My wings: have dust-like scales

Fly
My eyes: are large and colorful
My mouth parts: are lapping and sucking

Mosquito
My favorite food: is blood
My mouth parts: are piercing and sucking

Cricket
My legs: are used during jumping
My color is: black

Grasshopper
You can find me: in meadows and fields
My hearing organs: are on my abdomen

Plants and Animals of the Desert

Cholla
Mystery clue: I have no leaves
My branches are: jointed and numerous

Joshua Tree
My leaves are: evergreen and clustered
My flowers: are in branched clusters

Yucca
My height is: 17 feet (5 m)
My leaves: are flat and leathery

Who Am I?

Saguaro
Mystery clue: I am 200 years old
My flowers: are white and funnel-shaped

Sagebrush
My height is: 8 feet (2.5 m)
My leaves: are green and aromatic

Sage
My height is: 20 inches (50 cm)
My leaves are: silvery and spear-shaped

Prickly Pear
My stems: are flat and round
Mystery clue: I'm considered a succulent

Mesquite
My height is: 18 feet (5.5 m)
My leaves: are compound and alternate

Jack Rabbit
My special feature: I have very long ears
My teeth: are 28 in number

Coyote
My voice is: a long howl
I'm related to: other canines

Mouse
I am active: at night
My teeth: are 16 in number

Pronghorn
My feet: have hoofs
My habits: I'm active night and day

Peccary
My length is: 3 feet (92 cm)
My other name: is 'Javelina'

Skunk
My colors are: black and white
My food habits: I'm omnivorous

Badger
My home is: a burrow
My tail is: short and bushy

Bighorn
My size is: 6 feet (1.8 m) long
Mystery clue: ewes are smaller than rams

Bobcat
I'm related to: the mountain lion
I'm related to: the lynx

Fox
My voice is: a weak bark
My tail is: long and bushy

Hummingbird
My favorite food: is nectar
My voice is: a squeak

Roadrunner
My size is: 22 inches (56 cm)
You can find me: in dense shrubs and trees

Quail
My size is: 10 inches (25 cm)
My other name: is 'Redhead'

Vulture
My size is: 32 inches (82 cm)
My head is: naked

Owl
My size is: 6 inches (15 cm)
My food habits: I'm a predator

King Snake
My size is: 6 feet (1.8 m)
I'm related to: other constrictors

Sidewinder
My size is: 30 inches (76 cm)
I'm related to: other pit vipers

Lizard
My size is: 12 inches (31 cm)
I am active: during the day

Tortoise
My size is: 12 inches (31 cm)
My food habits: I'm a herbivore

Grasshopper
My special feature: large back legs for jumping
Mystery clue: I have chewing mouth parts

Tarantula
My size is: 2.5 inches (6.4 cm)
My legs: are long and hairy

Scorpion
My size is: 5 inches (13 cm)
My food habits: I'm a predator

Ocean Life

Scallop
My shell is: often seen at gas stations
To see, I have: 100 eyes around my shell

Octopus
Special Feature: I can squirt ink
My foot is: stretched into 8 tentacles

Blue Whale
Special Clue: I am the largest animal
My weight is: 120-200 tons

Diatoms
My size is: too small to be seen
I am part of the: phytoplankton

Starfish
Special Clue: I usually have five arms
The number five is: important to my body plan

Sea Anemone
I have tentacles: that sting my food
I am shaped like a: cylinder with tentacles

Barnacle
When I am grown up: I stick to rocks and boats
My relatives are: crustaceans

White Shark
My favorite foods: are seals and sea lions
Some call me: the white death

Whale Shark
I am the largest: fish on the planet
My size is: 60 feet long and 20 tons

Narwhal
Males have: an eight to ten foot tusk
One of my tusks: spirals 8 feet forward

Manatee
My other name is: the sea cow
Sailors thought: we were mermaids

Sawfish
My long nose is: edged with 64 teeth
My extended nose is: edged with 64 teeth

Swordfish
My upper jaw is a: long, sharp sword
My upper jaw is: a long, sharp sword

Ocean Sunfish
My biggest part is: my head
My name is the same: as a small freshwater fish

Walrus
Two of my top teeth: are long tusks
My habitat is: in Arctic waters

Coral
I build: reefs and islands
My colonies form: reefs, atolls, and islands

Clownfish
My colors are: orange with bright stripes
Unlike other fish: I am not stung by anemones

Green Turtle
My relatives are: tortoises
I reproduce by: laying 100 eggs on beaches

Oyster
When disturbed I: can make valuable pearls
In mythology, I: gave birth to Venus

Nudibranch
My other names are: sea slug and sea hare
My other names are: sea hare and sea slug

Cord Grass
My leaf blades: are flat and green
Unlike seaweeds, I: have true roots and stems

Sand Worm
I am related to: earthworms and leeches
I am usually found: under rocks, near shore

Steamer Clam:
I live inside: two shells hinged together
My shell is: white, oval, and brittle

Lobster
I am a favorite on: restaurant menus
I am strong enough: to crush clams in my claws

Blue Crab
My flesh is: sweet and delicious
I am related to: lobsters and barnacles

Hermit Crab
For protection, I: borrow empty shells
I use 4 of my legs: to hold my borrowed shell

Dolphin
I am often found: in aquarium shows
When I can't see: I can use echolocation

Killer Whale
My color is: black and white
My only enemy is: man

Sea Snake
My relatives are: coral snakes and lizards
My relatives are: coral snakes and lizards

Anglerfish
In front of my nose: dangles a fishing lure
I catch fish with a: lure in front of my mouth

Sargassum
To float, I have: air filled bladders
In order to float: I have gas-filled bladders

Mangrove
I stay up on: roots, like stilts
Botanists say I'm a: woody, evergreen shrub

Sea Urchin
My shape is: like a pin cushion
My skin is: covered with long spines

Sea Horse
My head is: shaped like a tiny horse's
I'm often attached: to seaweed by my tail

Sea Cucumber
Around my mouth is: a ring of tentacles
My shape is like a: long sack with tentacles

Giant Clam
I am the largest: bivalve on earth
My shell's edges: are wavy and interlock

Giant Squid
I have ten: tentacles
I have ten: tentacles

Sperm Whale
I am the largest of: the toothed whales
You can read of me: in the book Moby Dick

Giant Kelp
Unlike trees, I: have no stems or leaves
I'm harvested for: food, medicine, and fodder

Manta Ray
To swim I: flap my "wings"
I am related to: sharks and skates

Animals of the Past

Trilobite
I am related to: crabs and lobsters
I moved by: crawling and swimming

Dragonfly
I was the largest: insect ever to have lived
My Class is: Insect

Sea Scorpion
My body was: long and flat and narrow
My special feature: was shell-cracking claws

Nautilus
My body was: soft inside a coiled shell
I used my: shell for protection

Sea Lily
My name means: I looked like a flower
My body was: a head, stem, and anchor

Brachiopod
My body was: covered by two shells
My body was covered: by two unequal shells

Armored Fish
My other name means: armored head
My head was: jawless and shielded

Terrible Fish
My head was: fitted with a huge jaw
My other name was: Dinichthys

Shark
I am related to: rays
I am related to: skates and rays

Lung Fish
I am related to: fish today that have lungs
My mystery clue is: I could breathe air

Lobe-Fin
I am related to: the first amphibians
I'm the ancestor of: the first amphibians

Ray-Fin
My special feature: was fan-like fins
I am an ancestor of: most bony fish alive today

Eryops
Some experts think: I floated like a crocodile
My head had: crocodile-like eyes on top

Ichthyostega
I lived: in water and on land
My legs were: fully formed with 5 toes

Diplocaulus
My head was: shaped like a big triangle
My head was: large and triangular

Dimetrodon
My special feature: was a fin-like back sail
My sail may have: controlled my temperature

Ichthyosaurus
My head had: a dolphin-like nose
My body was like: a dolphin: 10 ft (3m) long

Plesiosaurus
My size was: 50 ft (15m) with a long neck
My body was: huge: 22,000 lbs and 50 ft

Tyrannosaurus
My name means: tyrant lizard
My forearms could: not reach my mouth

Stegosaurus
My special feature: was 2 rows of back plates
My best defense was: my heavy sharp-spiked tail

Corythosaurus
I am related to: the duck-billed dinosaurs
My special feature: was a skullcap (crest)

Plateosaurus
I was the largest: dinosaur of my time
I am related to the: huge long-necked dinosaurs

Ankylosaurus
My body was: a living tank
My mystery clue is: I resemble a huge turtle

Iguanodon
My name means: iguana tooth
My teeth: resembled iguana's teeth

Ornitholestes
My tail was: long and thin for balance
I moved: rapidly, pouncing on prey

Triceratops
My special feature: was three horns on my head
My special feature: was a horn on my nose

Struthiomimus
My name means: ostrich imitator
My head was: small with a horny beak

Pteranodon
My wingspan was: 20 to 30 feet (6-9 meters)
I moved: by soaring and gliding

Pterodactylus
My wingspan was: 19 inches (48 centimeters)
I moved by: soaring and gliding

Archaeopteryx
My skin was: covered with feathers
My tail had: bones and paired feathers

Diatryma
My beak was: parrot-like and huge
My head was: enormous for my body size

Thunder Beast
My head had: a y-shaped nose horn
I probably used my: big y-shaped horn to fight

Irish Elk
My special feature: was antlers 10 ft across
My best defense was: my huge antlers

Saber-Tooth
My body has: been found in tar pits
My special feature: was 8 in. (20cm) sharp fangs

Armadillo
My skin was: mostly bony rings and hair
My best defense was: bony armor and tail spikes

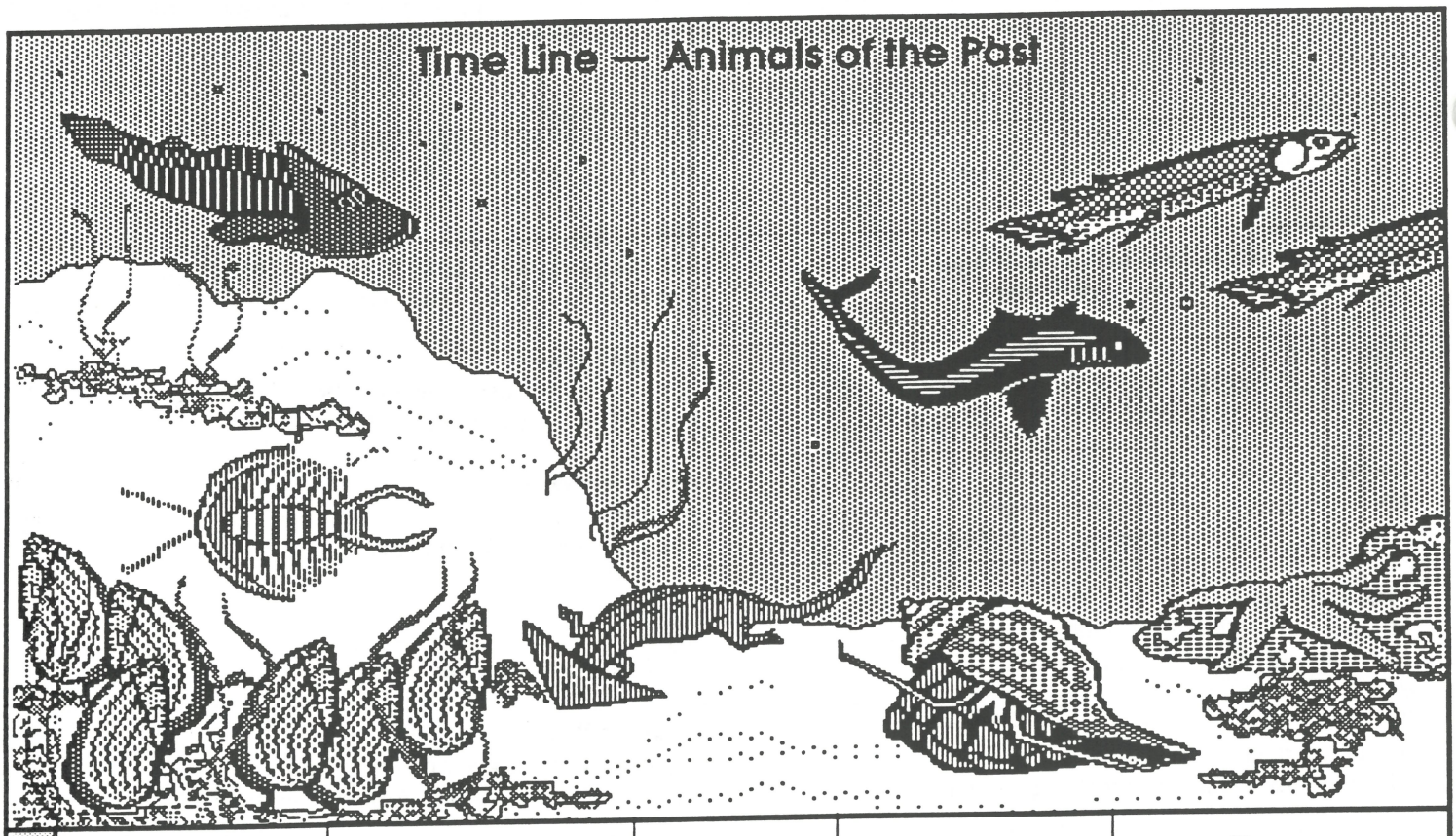
Mammoth
My mystery clue is: I grew long tusks
I probably used my: tusks to clear snow

Dawn Horse
I am related to: today's horses
I am an ancestor of: the modern horse

Woolly Rhino
My head had: 2 horns; 1 over my nose
My body was: covered with fur

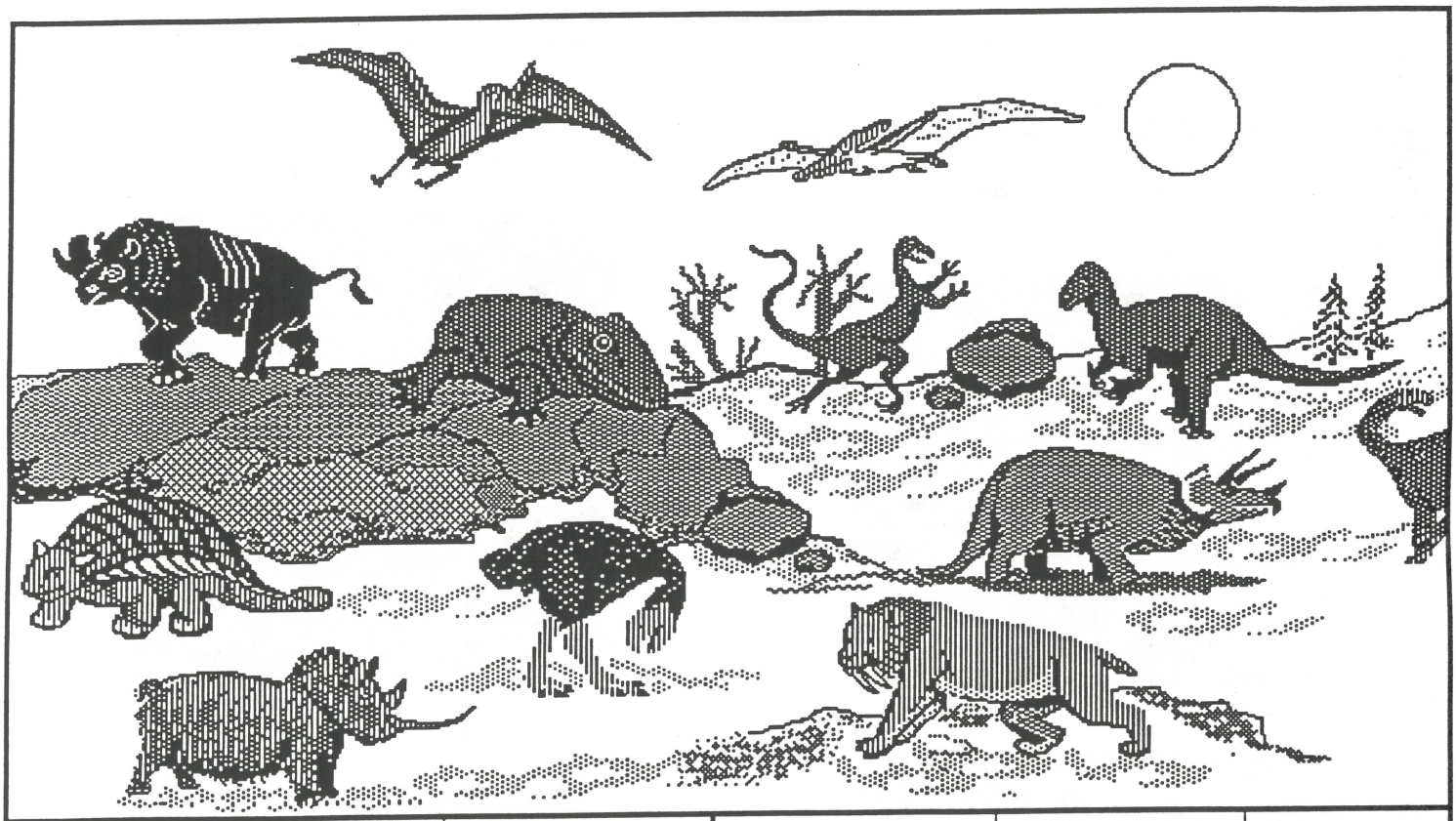
Ground Sloth
I probably ate: tree leaves with my tongue
I moved: slowly on my knuckles

Early Whale
I lived: in water but needed air
My class is: Mammal



ANIMAL	Brachiopod Trilobite	Sea Scorpion Nautilus Sea Lily	Armored Fish	Ichthyostega Terrible Fish Ray-Fin Lung Fish Shark Lobe-Fin	Eryops Dragonfly
MILLYRS AGO	570-500	500-435	435-395	395-345	345-280
PERIOD	CAMBRIAN	ORDOVICIAN	SILURIAN	DEVONIAN	CARBONIFEROUS
ERA	PALEOZOIC				

© 1989 Focus Media, Inc.



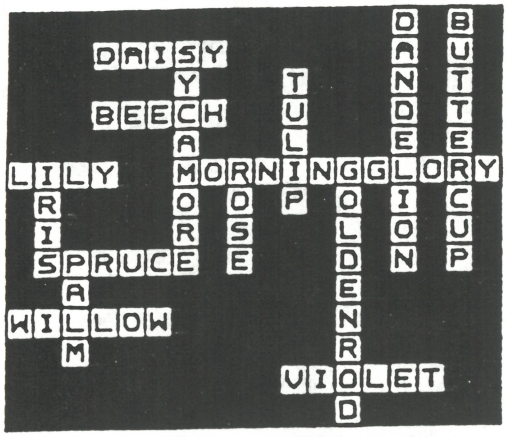
Dimetrodon Diplocaulus	Plateosaurus Ichthyo-saurus	Archaeopteryx Stegosaurus Ornitholestes Pterodactylus Plesiosaurus	Triceratops Tyrannosaurus Ankylosaurus Pteranodon Iguanodon Corythosaurus Struthiomimus	Thunder Beast Armadillo Ground Sloth Diatryma Early Whale Dawn Horse	Irish Elk Woolly Rhino Sabertooth Mammoth
280-225	225-195	195-136	136-65	65-2	2—Present
PERMIAN	TRIASSIC	JURASSIC	CRETACEOUS	TERTIARY	QUATERNARY
MESOZOIC			CENOZOIC		

© 1989 Focus Media, Inc.

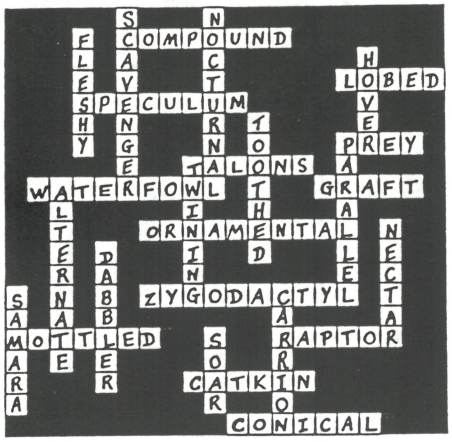
Answer Keys

Birds, Trees, and Flowers

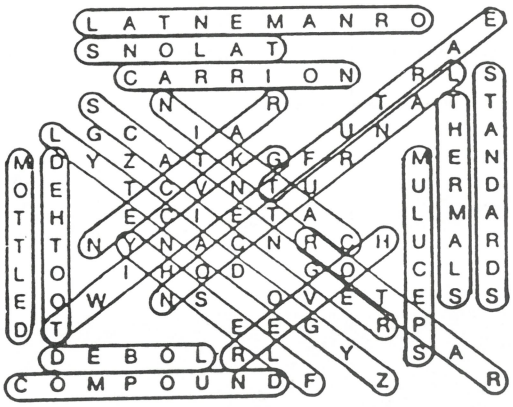
Crossword Puzzle 1



Crossword Puzzle 2



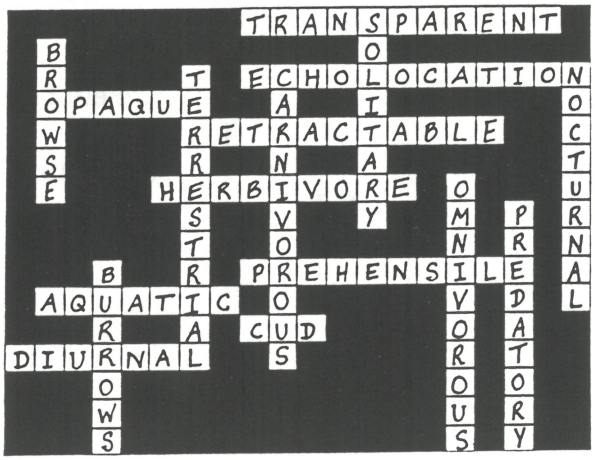
Word Search Puzzle



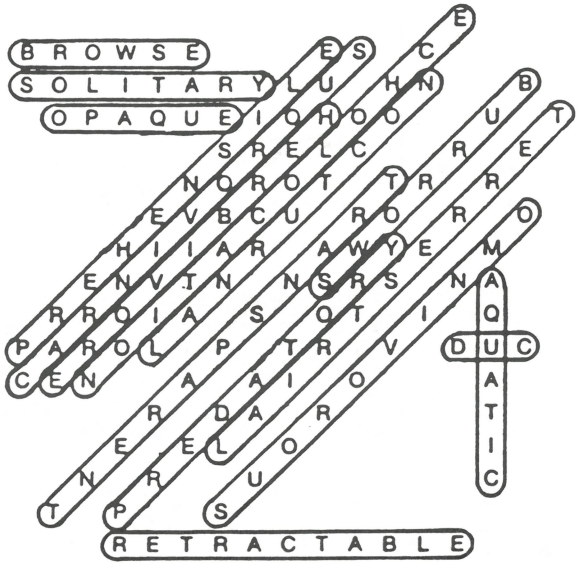
Mammals, Reptiles, and Insects

Crossword Puzzle 1

Crossword Puzzle 2

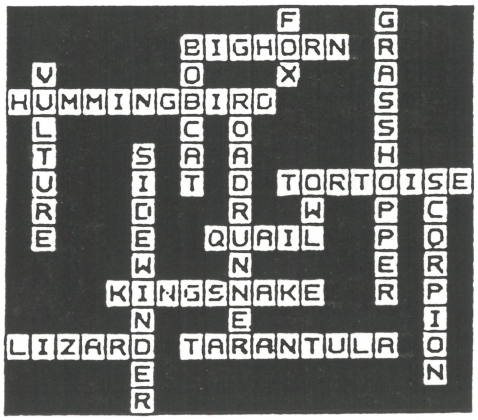


Word Search Puzzle

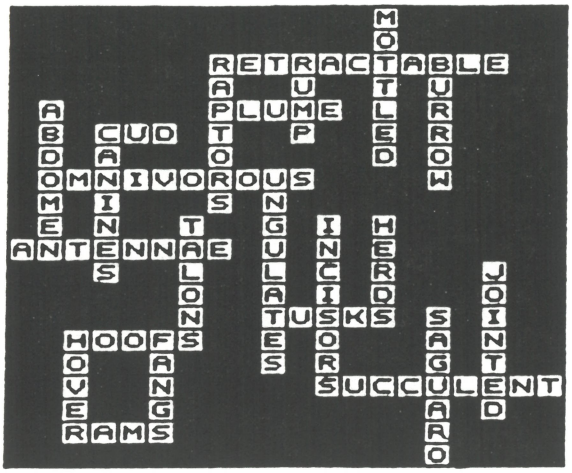


Plants and Animals of the Desert

Crossword Puzzle 1

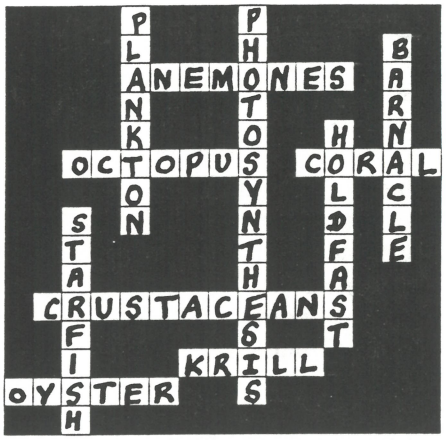


Crossword Puzzle 2



Ocean Life

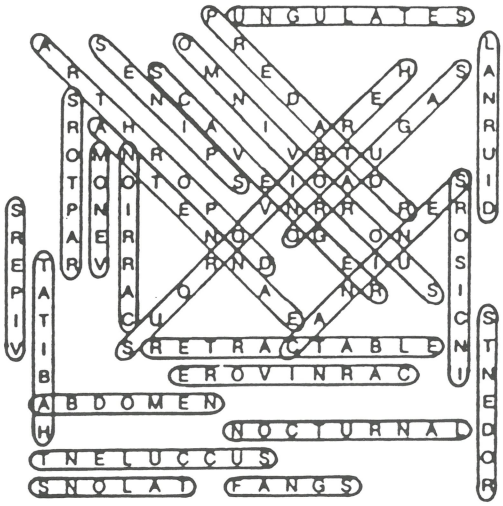
Crossword Puzzle



Size Places

1. cdab
2. abdc
3. bcda
4. badc
5. acdb
6. acdb
7. cabd
8. cdba

Word Search Puzzle



What's for Dinner?

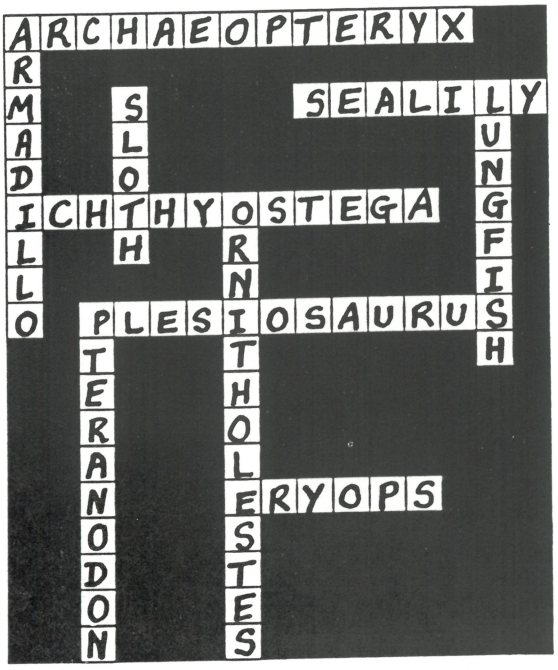
1. clams
2. krill
3. shellfish
4. seals and sea lions
5. water plants
6. shellfish
7. phytoplankton
8. sea anemones
9. kelp and other seaweed
10. squid

What's Different?

	answer	commonality
1.	c	mammals
2.	b	microscopic
3.	d	plants
4.	d	classifications
5.	a	body parts
6.	b	bivalves
7.	d	kinds of animals
8.	c	internal skeletons
9.	c	no bones
10.	a	exoskeletons
11.	a	gill breathers
12.	b	gill breathers

Animals of the Past

Crossword Puzzle

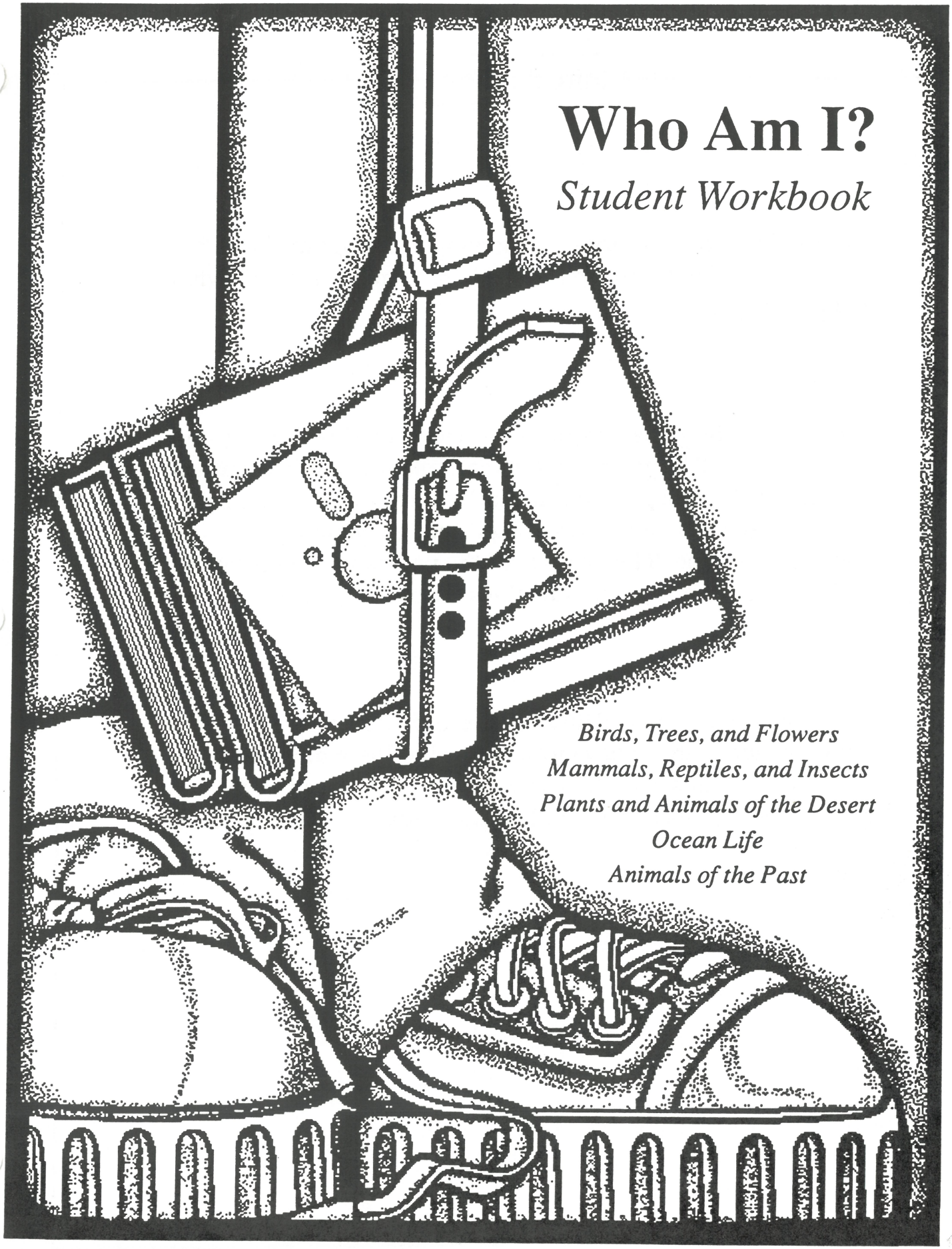


Fact Finder

1. dragonfly
2. nautilus
3. mammoth or woolly rhino
4. triceratops
5. herbivore
6. herbivore
7. tyrannosaurus
8. meat or other animals
9. dimitrodon
10. brachiopod
11. trilobite
12. lobe-fin
13. plesiosaurus
14. pterodactylus
15. archaeopteryx
16. thunder beast
17. saber-tooth tiger
18. Jurassic
19. Cretaceous
20. Triassic

What's Different?

1. b
2. a
3. c
4. a
5. b
6. c
7. c
8. b
9. a
10. a
11. c
12. b
13. c
14. a
15. c
16. a
17. c
18. b
19. a
20. b



Who Am I?

Student Workbook

Birds, Trees, and Flowers
Mammals, Reptiles, and Insects
Plants and Animals of the Desert
Ocean Life
Animals of the Past

Introduction

You are about to use a very exciting computer program that is fun, too. *Who Am I?* will help you learn about plants or animals while you play a game.

The object of the game is to guess the names of different "mystery items." You will be given clues for each plant or animal, and you may choose to see a picture of it. Each clue or picture costs points from your score. If your score is high enough, you may even find your name on the "Honor Roll" of the program! The computer will give you step-by-step directions for playing the game.

In this workbook you will find puzzles and activity sheets. Follow your teacher's directions before beginning these activities. You will also find glossaries that will explain terms used in the program. These glossaries will be helpful to you as you complete the puzzles.

© 1986, 1989 Focus Media, Inc.

Clue Sheet

Name _____ Date _____

Type of Clue	The Clues

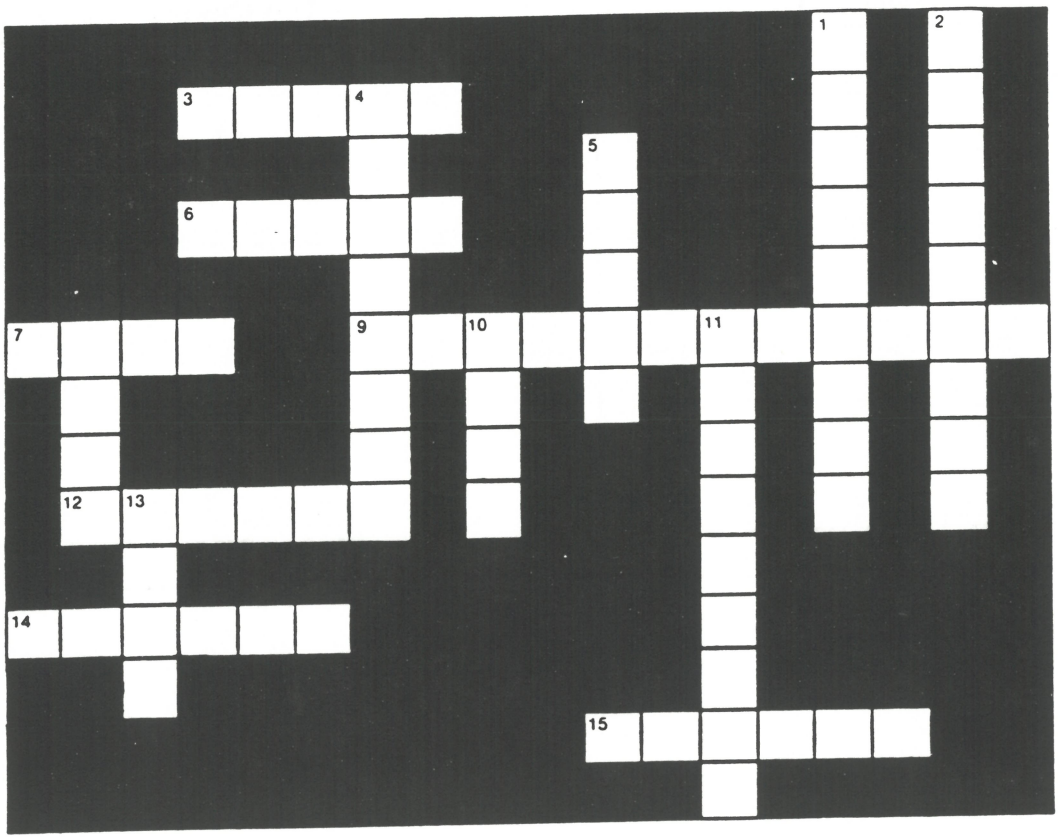
Choices	Picture

Correct Answer

© 1986, 1989 Focus Media, Inc.

Crossword Puzzle 1

Name _____ **Date** _____



Across Clues

3. I'm white with a yellow center.
6. My leaves are green and egg-shaped, and my bark is pale gray.
7. I have a white, trumpet-shaped flower and am popular at Easter.
9. My flowers are trumpet-shaped and open at sunrise.
12. I'm blue-gray and have short needles.
14. My branches are long and limp, and I'm described as sad.
15. I'm deep purple and found in fields.

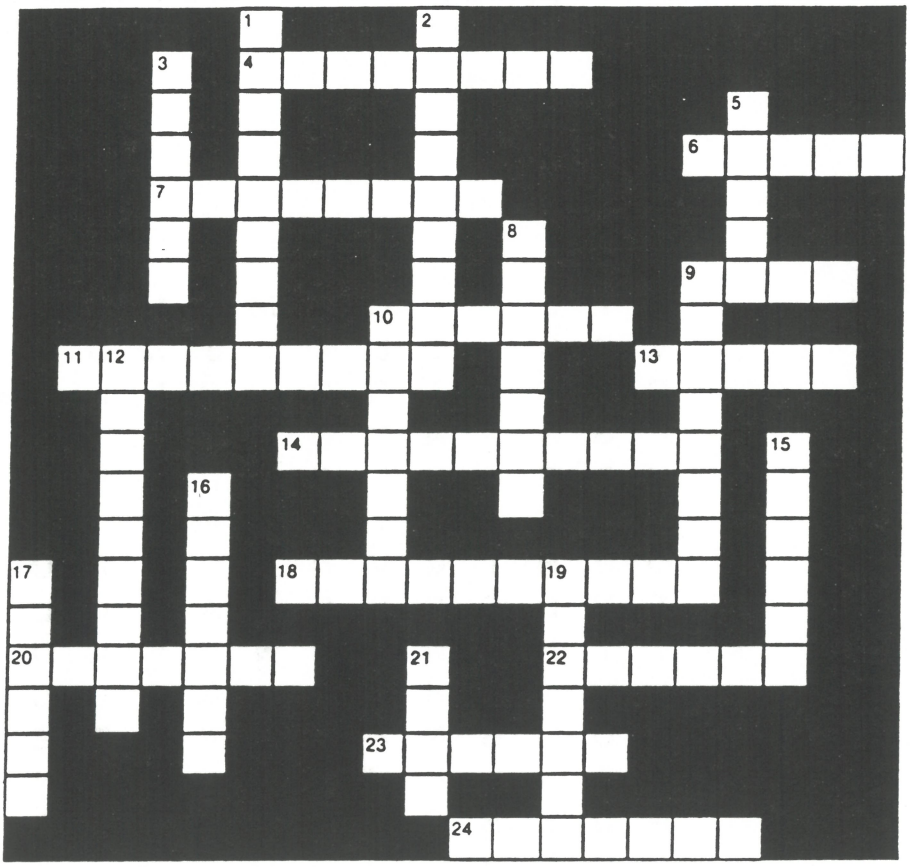
Down Clues

1. I'm yellow, found in lawns, and my seeds float in the wind.
2. I'm yellow and found in meadows.
4. I'm one of the largest trees, and my bark flakes off in patches.
5. I'm from Holland, and my colors are red and yellow.
8. I have large, showy purple flowers and bloom in the spring.
10. I have thorns and smell sweet.
11. I'm gold-colored and have an unpleasant smell.
13. You can find me in warm areas, and my fruit is a coconut.

© 1986, 1989 Focus Media, Inc.

Crossword Puzzle 2

Name _____ Date _____



Across Clues

4. A leaf made up of leaflets
6. A leaf with round, wavy edges
7. The patch of color on a mallard's wing
9. The animals that are killed by a hawk for food
10. The claws of an owl
11. Name of the group of ducks and geese
13. A stem that is cut and joined to another stem
14. A tree planted for its beauty
18. Two toes forward; two backward
20. Covered with spots
22. Another name for a bird of prey
23. A fuzzy cluster of tiny flowers
24. Shaped like a cone

Down Clues

1. An animal that eats dead animals
2. Active at night
3. A fruit that is very moist inside
5. To fly while staying still in the air
8. A leaf with sharp points on the edge of the leaf
9. Veins that run side-by-side in a leaf
10. The coiling or twisting growth of a stem
12. Leaves that grow on a stem where no other leaves grow
15. The sweet juice inside a flower
16. A duck that feeds by dipping its head in the water
17. A dry fruit that has a wing on one side
19. The flesh and muscles of a dead animal
21. To fly without beating the wings

© 1986, 1989 Focus Media, Inc.

Word Search Puzzle

Name _____ **Date** _____

Find these vocabulary words in the puzzle below. The words may be found going up, down, right to left, left to right, or on a slant. Circle the words when you find them.

1. SCAVENGER
2. ZYGODACTYL
3. NOCTURNAL
4. MOTTLED
5. CARRION
6. TWINING
7. THERMALS
8. TALONS
9. ORNAMENTAL
10. SPECULUM
11. CATKIN
12. STANDARDS
13. NECTAR
14. FLESHY
15. COMPOUND
16. LOBED
17. TOOTHED
18. EARTUFT
19. RAPTOR
20. HOVER

P	T	L	A	T	N	E	M	A	N	R	O	T	E
V	B	S	N	O	L	A	T	J	M	G	V	A	E
C	M	H	C	A	R	R	I	O	N	L	R	L	S
P	G	S	H	N	Y	G	R	L	O	T	A	T	T
H	L	G	C	E	I	A	U	P	U	N	N	H	A
M	D	Y	Z	A	T	K	G	F	R	I	M	E	N
O	E	H	T	C	V	N	T	U	U	R	U	R	D
T	H	D	E	C	I	E	T	A	A	I	L	M	A
T	T	N	Y	N	A	C	N	R	C	H	U	A	R
L	O	W	I	H	O	D	P	G	O	D	C	L	D
E	O	W	B	N	S	Y	O	V	E	T	E	S	S
D	T	A	I	I	V	E	E	G	P	R	P	L	P
N	D	E	B	O	L	R	L	E	Y	B	S	A	S
C	O	M	P	O	U	N	D	F	U	Z	D	D	R

© 1986, 1989 Focus Media, Inc.

Glossary

alternate: Some plants have alternate leaves. Each leaf grows from a place on the stem where no other leaf grows. The willow tree has alternate leaves.

carrion: Carrion is the flesh of a dead animal.

catkin: A catkin is a fuzzy group of tiny flowers. Catkins look like caterpillars. Willow trees have catkins.

cluster: A cluster is things of the same kind that grow or are grouped together.

compound: A compound leaf is one leaf made up of many smaller leaflets. The walnut tree has a compound leaf.

conical: Conical means "cone-shaped." Some birds have conical bills.

dabbler: A dabbler is a duck that does not dive for food. Instead, it sticks its head into the water and sticks its tail into the air.

eartuft: Eartufts are feathers on an owl's head that stick out. They look like ears.

edible: Edible means able to be eaten.

fleshy: Some fruits are fleshy. This means that they are very moist inside. Apples and plums are types of fleshy fruits.

funnel: A funnel is a tool that has a wide cone at one end and a thin tube at the other.

graft: A graft is a stem that is cut off and attached to a living stem of another plant.

habitat: A habitat is a place where an animal or plant naturally lives and grows.

hover: When a bird flies but stands still in the air, it is hovering.

lobed: A leaf that has lobes has an edge with round, wavy sections. An oak leaf has lobes.

massive: Massive means very big.

mottled: Something that is mottled is covered with spots or streaks.

nectar: Nectar is the sweet juice found inside flowers. Many birds drink nectar as food.

nocturnal: The word nocturnal means active at night. An owl is an example of a nocturnal bird.

© 1986, 1989 Focus Media, Inc.

ornamental: A tree that is planted for its beauty is called an ornamental.

palmate: A palmate is a leaf that has leaflets or lobes coming from one point in the leaf.

parallel-veined: Every leaf has ridges on it. In some leaves, the ridges are side-by-side and go in the same direction. These leaves have parallel veins.

prey: The word prey means any animal that is killed and used as food. Mice, rabbits, and snakes are the prey of hawks.

raptor: A raptor is another name for a bird of prey. Hawks, eagles, and owls are all raptors.

rodent: A rodent is a type of mammal with fur. Some birds, like hawks, eat rodents. Some types of rodents are mice, rats, squirrels, and chipmunks.

samara: A samara is a dry fruit that has a large wing on one side. The fruits drop off a tree and spin in the air like helicopters. The maple's fruit is a pair of samaras.

scavenger: A scavenger is an animal that eats dead animals. A vulture is one type of scavenger.

soar: Birds that soar can fly without flapping their wings. Hawks and vultures are two types of birds that soar.

speculum: A speculum is a small patch of colored feathers on the wings of a duck.

standards: Standards are the narrow, upright petals of an iris.

talons: The sharp claws of a hawk or owl are called talons.

thermals: Thermals are large columns of rising, hot air.

toothed: A leaf that is toothed has many sharp points on the edge of the leaf. A beech leaf is toothed.

tropical: Tropical means having to do with the region of the earth near the equator where it's always hot.

twining: A stem that grows twisting or coiled around a twig or a fence is a twining stem. The morning glory and other vines have twining stems.

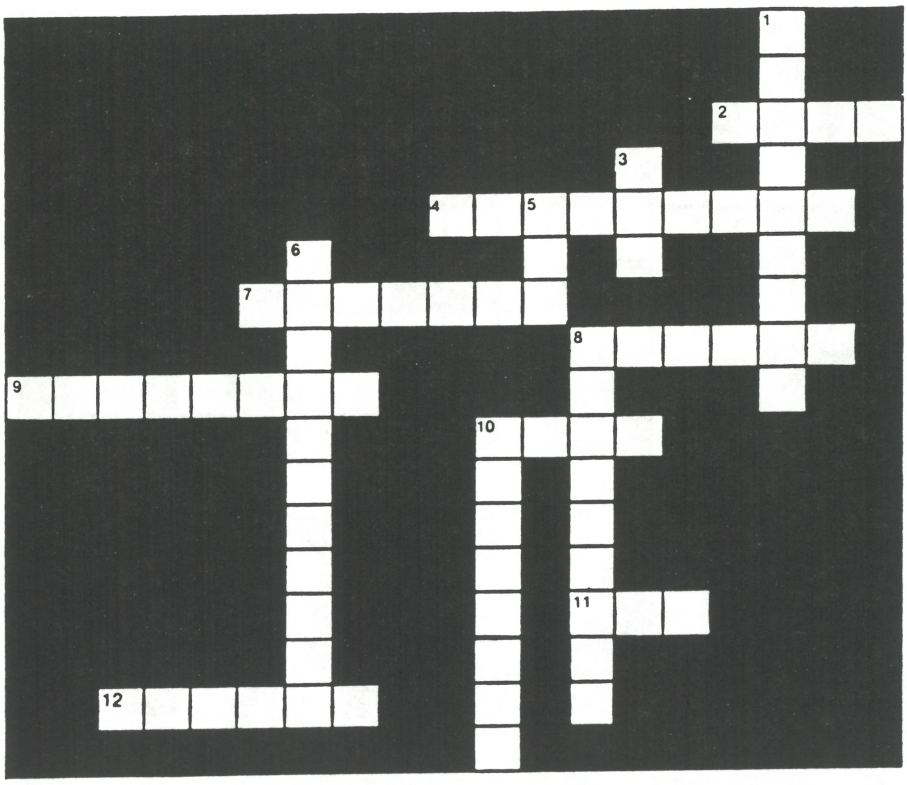
waterfowl: The group of birds that includes ducks, geese, and swans.

zygodactyl: Zygodactyl describes the birds' feet that have two toes pointing forward and two toes pointing backward.

© 1986, 1989 Focus Media, Inc.

Crossword Puzzle 1

Name _____ Date _____



Across Clues

2. I'm a stinging insect that builds nests for my eggs.
4. I'm a long, thin reptile and can change my color.
7. My back legs are used for jumping and I chirp.
8. I have hard front wings and I chew my food.
9. I'm a reptile with a shell and am related to the snapping turtle.
10. My wings are dusty and scaly and I come to lights at night.
11. I fly with a buzzing sound and am found around garbage.
12. I am a long, thin reptile that blends into my surroundings.

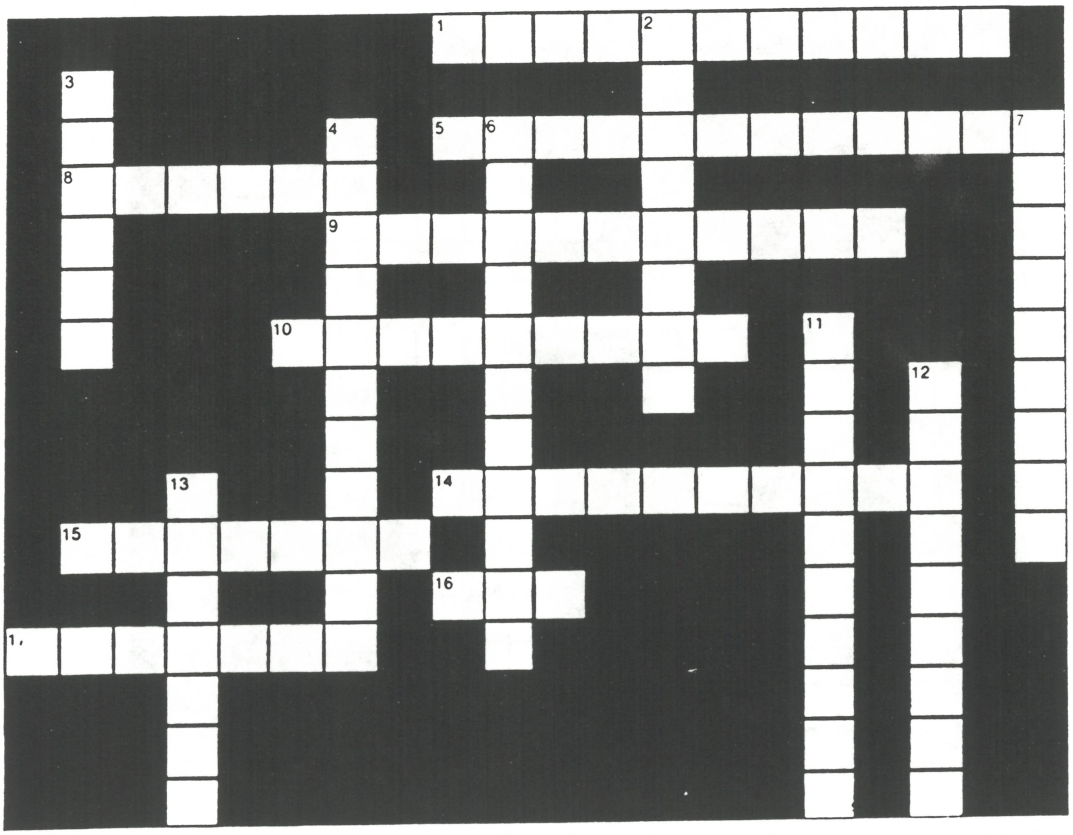
Down Clues

1. I'm an insect with long, transparent wings and live near water.
3. I'm a black and yellow insect and I sting my enemies.
5. I'm a black insect and I live in colonies.
6. My favorite food is grass and I sing by rubbing my wings.
8. I have large and colorful wings and I change from a caterpillar.
10. My favorite food is blood and I can carry disease.

© 1986, 1989 Focus Media, Inc.

Crossword Puzzle 2

Name _____ **Date** _____



Across Clues

1. Describes something that light can easily pass through
5. Bats use this to find food.
8. This describes something that light cannot pass through.
9. Claws or fangs that can be pulled in and out of view
10. An animal that eats plant materials only
14. A tail that is used for grabbing on to things
15. An animal that lives in the water
16. Food that is chewed a second time
17. An animal that is active during the daytime

Down Clues

2. An animal that lives alone
3. To eat leaves and twigs off low branches
4. An animal that lives on land
6. Describes animals that eat other animals
7. An animal that is active at night
11. An animal that eats both plants and other animals
12. Describes an animal that kills other animals for food
13. Holes or tunnels that an animal digs in the ground

© 1986, 1989 Focus Media, Inc.

Word Search Puzzle

Name _____ **Date** _____

Find the vocabulary words in the puzzle below. The words may be found going up, down, right to left, left to right, or on a slant. Circle the words when you find them.

1. TRANSPARENT
2. TERRESTRIAL
3. RETRACTABLE
4. OMNIVOROUS
5. CARNIVOROUS
6. ECHOLOCATION
7. PREHENSILE
8. NOCTURNAL
9. HERBIVORE
10. AQUATIC
11. BROWSE
12. BURROWS
13. OPAQUE
14. PREDATORY
15. SOLITARY
16. CUD

Q	D	A	O	V	U	E	W	O	F	O	O	G	E	H	F	S
B	R	O	W	S	E	R	M	F	E	S	G	C	W	U	A	X
S	O	L	I	T	A	R	Y	L	U	O	H	N	U	S	B	U
W	O	P	A	Q	U	E	I	O	H	O	O	G	Q	U	X	T
X	I	R	Q	O	T	S	R	E	L	C	M	M	R	Y	E	R
K	X	B	M	X	N	O	R	O	T	V	T	R	T	R	K	X
J	K	D	X	E	V	B	C	U	K	R	O	R	R	X	O	L
K	Y	H	H	I	I	A	R	G	A	W	Y	E	J	M	X	H
E	E	E	N	V	T	N	T	N	S	R	S	X	N	A	W	I
R	R	R	O	I	A	R	S	D	O	T	P	I	O	Q	F	W
P	A	R	O	L	P	P	Y	T	R	J	V	Y	D	U	C	M
C	E	N	B	T	A	M	A	I	E	O	U	H	N	A	S	U
B	H	G	J	R	W	D	A	A	R	N	W	V	X	T	N	X
F	K	C	E	E	E	L	S	O	Y	E	H	E	L	I	I	K
A	W	N	O	R	I	X	U	C	A	M	P	H	F	C	A	V
Z	T	F	P	N	K	S	Q	K	Q	V	N	B	R	H	N	B
Z	V	H	R	E	T	R	A	C	T	A	B	L	E	L	V	O

© 1986, 1989 Focus Media, Inc.

Glossary

aquatic: An aquatic animal is one that lives mainly in the water.

arthropods: Arthropods are creatures which include spiders, crabs, and insects.

auditory organs: Auditory organs deal with the sense of hearing.

browse: An animal that browses eats leaves and young stems. Usually, these leaves and stems are from trees that have branches low to the ground.

burrows: Burrows are holes and tunnels that animals dig. Usually, animals that make burrows use them for their homes.

carnivorous: A carnivorous animal is one that eats other animals.

camouflage: Camouflage is a disguise or false appearance where creatures blend into their background.

canines: Canines are animals that are related to the dog. Canine teeth are long, pointed front teeth near the front of the mouth that help an animal to tear up meat.

chrysalis: A chrysalis is a cocoon-like case found around a young butterfly before it comes out as a butterfly.

compound eye: Most insects' eyes are made up of many light-sensitive parts. This is known as a compound eye.

cud: Some animals chew their food, swallow it, and later on, bring it back into their mouths and chew it some more. This food that is brought back into the mouth is called cud.

drought: A long period of time without rain is called a drought.

echolocation: When an animal makes noises and listens to the echoes, the animal is using echolocation. Echolocation is used to find food and to help the animal to move around.

fangs: Fangs are large, pointed teeth found on some animals.

forepaws: Paws on an animal's front leg are forepaws.

habitat: A habitat is a place where an animal or plant naturally lives and grows.

herbivore: A herbivore is an animal that eats plants or plant material, like fruits, seeds, leaves, and stems.

hibernate: When animals sleep through the whole winter, night and day, they hibernate.

larva, larvae (plural): The wingless form of a newly-hatched insect is larva.

© 1986, 1989 Focus Media, Inc.

mandible: The lower jaw in mammals, the upper or lower beak of a bird, and any mouth part of an insect are all known as mandibles.

membranes: A membrane is a thin layer of skin or tissue.

metamorphosis: Metamorphosis is a series of changes that animals go through to pass from the immature stage to adult.

nectar: Nectar is the sweet juice found inside flowers. Many birds use nectar as food.

nocturnal: A nocturnal animal is one that is active at night. An owl is a nocturnal animal.

omnivorous: An omnivorous animal eats both plants and animals.

opaque: Light cannot go through something that is opaque. The shell of a beetle is opaque.

pollinate: Pollinate means to bring pollen, a yellowish powder found in flowers, from one plant to another to fertilize.

pits: A dent in an animal's body surface.

predatory: A predatory animal is one that preys on other animals. An animal that kills other animals for food is a predatory animal.

prehensile: A prehensile tail or paw is one that is used for grabbing onto something.

prey: An animal that is hunted by another animal for food is prey.

protrude: To protrude is to stick out.

regenerate: To replace a lost body part by forming a new one is to regenerate.

rodent: The family of mammals that includes rats, mice, squirrels, and beavers is called rodent.

retractable: An animal with retractable claws or fangs can pull them in so that you cannot see them.

solitary: An animal that lives alone or not in a group is described as solitary.

terrestrial: A terrestrial animal is one that lives on land.

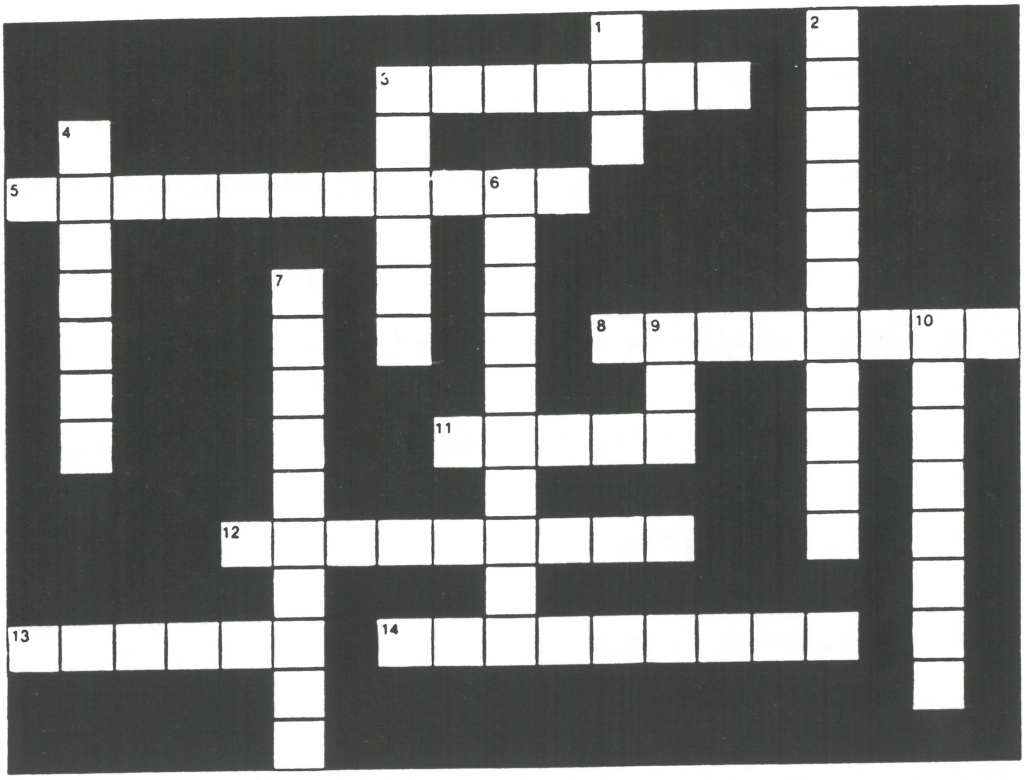
transparent: Light can easily go through something that is transparent. The wing of a bee or fly is transparent.

vixen: A vixen is a female fox.

© 1986, 1989 Focus Media, Inc.

Crossword Puzzle 1

Name _____ **Date** _____



Across Clues

3. I'm also called a Rocky Mountain sheep.
5. I'm the smallest of birds and I eat nectar.
8. I have a shell and move very slowly.
11. I'm a bird with a large plume on my head and I nest on the ground.
12. I'm scaly, 6 feet long, and I kill by squeezing.
13. I'm a scaly reptile that eats insects.
14. I'm a hairy spider with a poisonous bite.

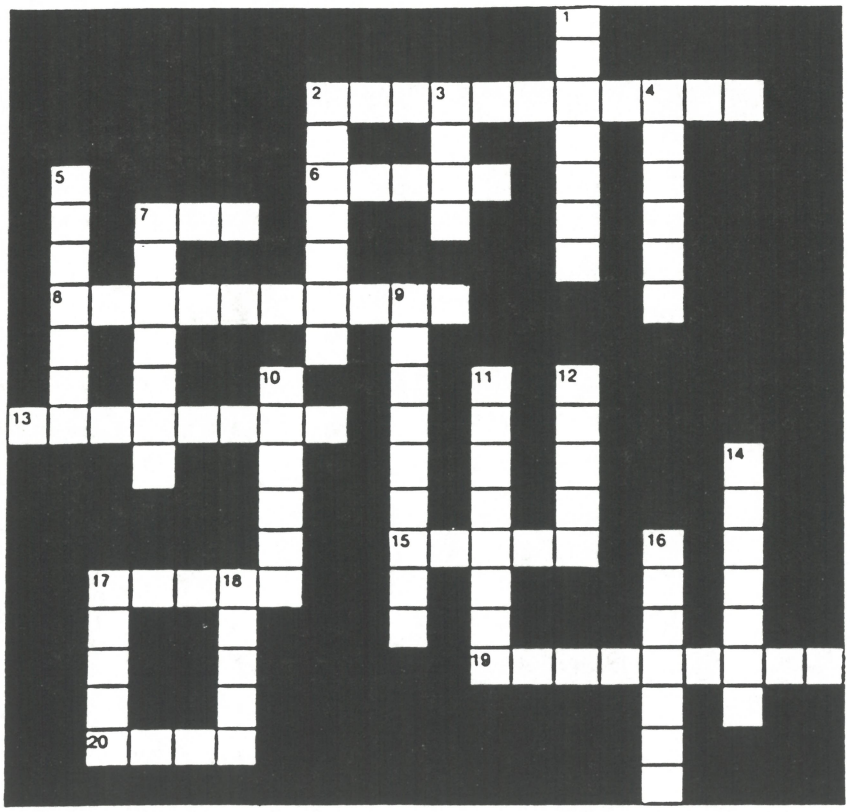
Down Clues

1. I have a bushy tail and live in a den.
2. I'm an insect with large back legs made for jumping.
3. I'm related to a mountain lion and climb trees.
4. My head is featherless and I'm also called a buzzard.
6. I'm a bird with powerful running legs.
7. I have fangs, my tail has a rattle, and my bite is poisonous.
9. I'm a bird that comes out at night and I have a hooked beak.
10. I have claw-like pincers and a poisonous stinger

© 1986, 1989 Focus Media, Inc.

Crossword Puzzle 2

Name _____ Date _____



Across Clues

2. Claws or fangs that can be pulled in
6. A large and showy feather
7. Food that has been chewed before
8. An animal that eats both plants and other animals
13. Another name for the "feelers" on an insect's head
15. Long teeth that grow outside the mouth
17. The feet of a horse or a deer
19. A plant that has a thick, juicy stem (like a cactus)
20. Another name for male sheep

Down Clues

1. Covered with spots or streaks
2. A word that describes hawks, owls, and eagles
3. The back end of an animal
4. A hole or tunnel dug by an animal
5. The back section of an insect's body
7. Relatives of the dog OR large tearing teeth
9. Animals that have hooves
10. The claws of a hawk or owl
11. Flat teeth used to cut food
12. Group of mammals that stay together
14. Branches that have sharp bends and look like they were joined
16. A giant cactus
17. To stay still in the air while flying
18. Large, sharp teeth of a snake or spider

© 1986, 1989 Focus Media, Inc.

Word Search Puzzle

Name _____ **Date** _____

Find the vocabulary words in the puzzle below. The words may be found going up, down, right to left, left to right, or on a slant. Circle the words when you find them.

1. HERBIVOROUS
2. RETRACTABLE
3. ARTHROPOD
4. OMNIVOROUS
5. CARNIVOROUS
6. NOCTURNAL
7. SCAVENGER
8. SUCCULENT
9. UNGULATES
10. ANTENNAE
11. INCISORS
12. PREDATOR
13. ABDOMEN
14. CANINES
15. CARRION
16. DIURNAL
17. HABITAT
18. RAPTORS
19. RODENTS
20. SAGUARO
21. SPINES
22. TALONS
23. VIPERS
24. FANGS
25. VENOM

Q N S A W K F P U N G U L A T E S N
P A E S T C O V R U I M W B P A P L
T O R Y E S Z M F E I L F S H E S A
Z I S T Z N C C N B D F K E E A T N
A B R A H M I A P I J A R F G N U R
V J O M N R L P V K V B T U K L J U
X O T O O T O O S E I O A O X D S I
S Z P N I D E P K V N R R L R E R D
R X A E R P J N O Q O G B O N O O P
E T R V R S I R N D N F E I U A S N
P A R A A Y O V Q A S L N R S S I F
I T T K C U B A S E E A C Z P Z C S
V I D C S R E T R A C T A B L E N T
Q B O W X I E R O V I N R A C K I N
O A B D O M E N N Z R Q O W P R E E
G H J I Q T F B N O C T U R N A L D
Y T N E L U C C U S M G I C G T K O
P S N O L A T A F A N G S Q T P E R

© 1986, 1989 Focus Media, Inc.

Glossary

abdomen: In insects, the abdomen is the back section of the body.

alternate: Some plants have alternate leaves. Each leaf grows from a place on the stem where no other leaf grows.

antennae: Most insects have antennae. The antennae are on the insect's head. The insect uses the antennae to feel, taste, and smell. Sometimes antennae are called "feelers."

aromatic: Aromatic means sweet-smelling.

arthropods: Arthropods are a group of animals. These animals include insects, spiders, scorpions.

barbed: Spines that are barbed have small and sharp tips that point backwards. This makes the spines hard to take out of skin or clothing.

burrow: A burrow is a hole or tunnel that an animal digs. Usually, animals that make burrows use them for their homes.

canines: Canines are animals that are related to the dog. Wolves, foxes, and coyotes are all canines.

canine teeth: Canine teeth are the long, pointed teeth near the front of the mouth. These teeth help an animal to tear up meat.

carnivore: A carnivore is an animal that eats other animals.

carrion: Carrion is the flesh of a dead animal.

clusters: When flowers grow in clusters, they grow in a large group or bunch.

cold-blooded: A cold-blooded animal has a body temperature that changes. On hot days, the animal's body is cold. Snakes, lizards, and spiders are examples of cold-blooded animals.

compound: A compound leaf is one leaf made up of many smaller leaflets.

crest: A crest is a group of long feathers that stick out on a bird's head.

cud: Some animals chew their food, swallow it, and later on, bring it back into their mouths and chew it some more. This food that is brought back into the mouth is called cud.

diurnal: A diurnal animal is one that is active during the daytime.

den: A den is a shelter used by animals. The den may also be the animal's home. Hollow logs and caves are two places that may be dens.

© 1986, 1989 Focus Media, Inc.

ewes: Female sheep are called ewes.

fangs: Fangs are large, pointed teeth. Most poisonous snakes have fangs.

flock: A flock is a group of birds that stays together.

funnel: A funnel is a tool that has a wide cone at one end and a thin tube at the other.

furrowed: Furrowed means long, narrow grooves in a surface.

habitat: The place or area where an animal or plant lives is its habitat.

herbivorous: A herbivorous animal eats plants or plant material, like fruit, seeds, leaves, and stems.

herd: A herd is a group of animals that stays together.

hooves: Hooves are tough coverings of some animals' feet. Horses, cows, and deer are examples of animals with hooves.

hover: When a bird flies but stands still in the air, it is hovering.

incisors: Incisors are the flat sharp teeth at the front of the mouth. Incisors are teeth that cut food, such as grass or leaves.

jointed: Branches that are jointed look like two branches that were joined together. Jointed branches have many sharp bends in them.

mottled: Something that is mottled is covered with spots or streaks.

nectar: Nectar is the sweet juice found inside flowers. Many birds and insects use nectar as food.

nocturnal: A nocturnal animal is one that is active at night.

omnivorous: An omnivorous animal eats both plants and other animals.

pincers: Pincers are claw-like parts. Animals like the scorpion use pincers for grabbing.

plume: A plume is a large, showy feather.

pod: A pod is a protective covering for seeds found in certain plants.

predator: A predatory animal is one that preys on other animals. An animal that kills other animals for food is a predator.

© 1986, 1989 Focus Media, Inc.

pulp: Pulp is the soft, moist part of fruit.

rams: Male sheep are called rams.

raptors: Raptors are birds of prey. Hawks, eagles, and owls are all raptors.

retractable: An animal with retractable claws or fangs can pull them in so that you cannot see them.

rodents: One group of mammals is the rodent. Examples of rodents are mice, rats, and squirrels.

rump: The rump is the back end of an animal.

saguaro: The saguaro is a giant cactus of the desert.

spines: Spines are very sharp thorns. Most cactus plants have spines instead of leaves.

succulent: A succulent is a plant with thick leaves and a very juicy stem. Most cactus plants are succulents.

talons: The sharp claws of a hawk or owl are called talons.

tufts: Tufts are groups of hairs that grow close together and are longer than other nearby hairs.

tusks: Tusks are long teeth that grow outside the mouth of an animal. Elephants and walruses are two types of animals that have tusks.

ungulates: Ungulates are animals that have hooves.

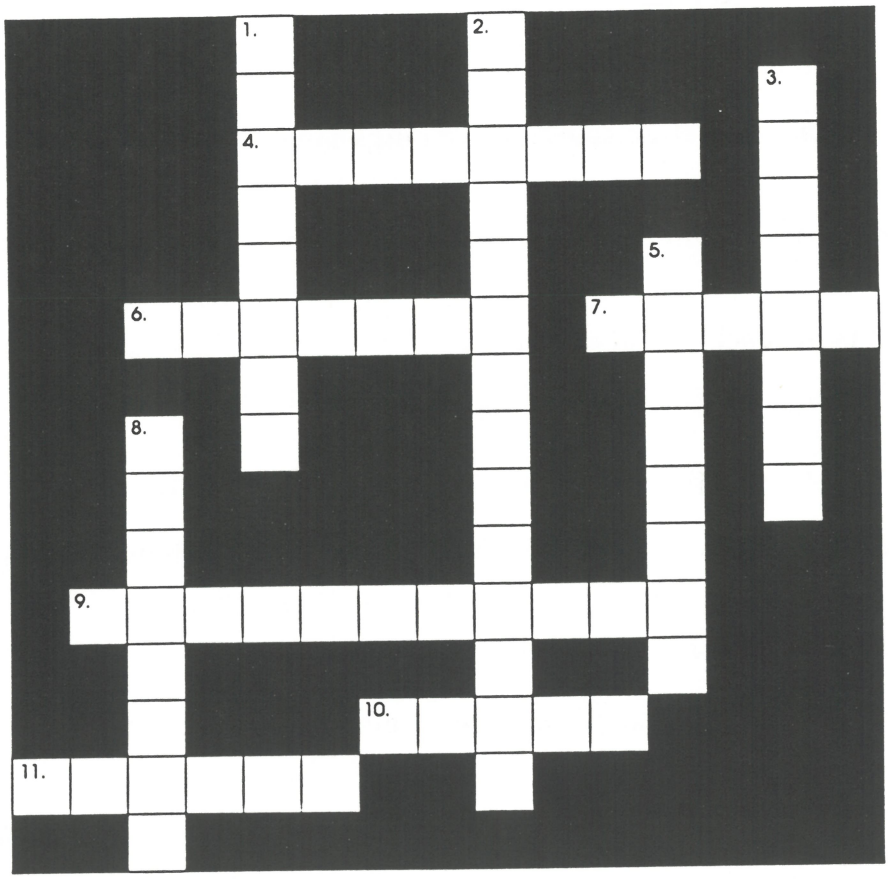
venom: Venom is a poison. Snakes and spiders are two kinds of animals that make venom.

vipers: Another name for poisonous snakes is vipers. Rattlesnakes are vipers.

© 1986, 1989 Focus Media, Inc.

Crossword Puzzle

Name _____ **Date** _____



Across Clues

4. Sea animals that sting their food and are very colorful are called____.
6. A(n)____ belongs to the same family as the squid and has eight tentacles.
7. Groups of ____build reefs and islands.
9. Animals that live mostly in water and have a hard shell are called ____.
10. ____are small shrimp that are food for many whales.
11. It's great if you find a pearl in one!

Down Clues

1. ____are very small plants and animals that float in the sea.
2. A way plants have of changing water and carbon dioxide into food.
3. I can be found sticking to rocks and ships.
5. The giant kelp anchors itself by using a root-like ____.
8. I usually have five arms.

© 1989 Focus Media, Inc.

Size Places

Name _____ **Date** _____

Arrange the following plants and animals by letter in size places with the smallest first. Think of each one when it is fully grown.

1	2	3	4				
___	___	___	___	1. a) lobster	b) walrus	c) diatom	d) scallop
___	___	___	___	2. a) plankton	b) sea horse	c) manatee	d) scallop
___	___	___	___	3. a) blue whale	b) hermit crab	c) starfish	d) dolphin
___	___	___	___	4. a) sea anemone	b) diatom	c) narwhal	d) sea turtle
___	___	___	___	5. a) steamer clam	b) octopus	c) starfish	d) manta ray
___	___	___	___	6. a) phytoplankton	b) kelp	c) algae	d) sea horse
___	___	___	___	7. a) nudibranch	b) manatee	c) sea horse	d) blue whale
___	___	___	___	8. a) lobster	b) starfish	c) barnacle	d) scallop

What's for Dinner?

For each animal listed, find out what it eats and write it in next to the animal.

1. starfish _____
2. blue whale _____
3. manta ray _____
4. white shark _____
5. manatee _____
6. walrus _____
7. oyster _____
8. nudibranch _____
9. sea urchin _____
10. sperm whale _____

As an extra challenge, try to illustrate each of the eating situations listed above.

© 1989 Focus Media, Inc.

What's Different?

Name _____ **Date** _____

In the following groups, one of the living things does not belong with the others. Think about what they have in common and circle the one that does not belong.

1. a. killer whale
   b. sperm whale
   c. octopus
   d. manatee

2. a. diatom
   b. mollusk
   c. plankton
   d. zooplankton

3. a. sargassum
   b. kelp
   c. algae
   d. oyster

4. a. mammal
   b. bivalve
   c. crustacean
   d. walrus

5. a. sea horse
   b. lungs
   c. gills
   d. baleen

6. a. scallop
   b. lobster
   c. clam
   d. mussel

7. a. carnivore
   b. herbivore
   c. scavenger
   d. kelp

8. a. walrus
   b. dolphin
   c. lobster
   d. shark

9. a. starfish
   b. octopus
   c. dolphin
   d. plankton

10. a. sunfish
    b. oyster
    c. lobster
    d. crab

11. a. whale
    b. ocean sunfish
    c. angler fish
    d. sawfish

12. a. nudibranch
    b. whale
    c. sea horse
    d. shark

© 1989 Focus Media, Inc.

Glossary

abdomen: In crustaceans, the abdomen is the hind part of the body; the belly.

appendage: Something attached to a larger thing is called an appendage. Your arm is an appendage of your body.

aquatic: An animal or plant that grows, or lives in or on the water is aquatic.

atoll: An atoll is an island that is made of coral and forms a ring around shallow water.

backbone: The column of bones in the back called the spine, can also be called the backbone.

baleen: A type of bone found in whales is baleen.

bioluminescent: Bioluminescent is some part of an animal that is lit by that animal's self-produced light.

bivalve: A marine animal with two shells hinged together, is a bivalve.

bladder: A small baglike part of the body is a bladder.

botanist: A botanist is a person who studies plants.

brittle: If something shatters easily, it is brittle.

calcium carbonate: Calcium carbonate is a solid substance found in limestone, marble, chalk, bones, and shells.

carnivorous: Meat-eating animals are called carnivorous.

cartilage: Cartilage is a strong, flexible material that is not as stiff or as hard as bone. It forms part of the skeleton. Your nose is made of cartilage.

cephalopods: Cephalopods are a type of mollusk that has tentacles attached to the head, usually with suckers on them. The octopus and squid are examples of this kind of mollusk.

chiton: Chiton is a kind of mollusk with a shell of calcium-containing plates.

© 1989 Focus Media, Inc.

crustaceans: Animals that live mostly in water and have a hard shell are called crustaceans. Lobsters and shrimp are examples of these.

delicacy: Something pleasing to eat because it is rare or special is called a delicacy.

docile: Something or someone that is easy to teach, train, or handle.

dorsal fin: The fin on the back of a fish is the dorsal fin.

echolocation: Echolocation is the ability to locate things by sound waves being reflected back to the sender in the form of echoes.

estuaries: Estuaries are arms of the sea that meet river currents.

exoskeleton: A hard supporting shell developed on the outside of a crustacean that acts like a skeleton is called an exoskeleton.

filter: To strain something is to filter it.

fodder: Food for horses, cows, and other farm animals is called fodder.

gland: A gland is a part inside the body that makes a substance that the body uses or gives off. Glands near the eyes make tears.

habitat: A place where an animal or plant naturally lives and grows is called a habitat.

holdfast: The part of an animal or plant that clings to something is called a holdfast.

horny plate: A flat part of the mouth of some whales has small bony structures sticking up from it. These small bony structures are called horny plates.

intertidal zone: An area of the seashore that is between areas of low and high tide is called an intertidal zone.

jet propulsion: Jet propulsion pushes something forward by the act of forcing liquid or gases out through the rear.

larvae: Larvae is the plural form of larva. It is the early form of any animal that at birth, or when it hatches, is different than how it will look as an adult.

lure: Bait that is not real and is used to catch fish is called a lure.

© 1989 Focus Media, Inc.

mammary glands: The glands of a warm-blooded animal that produce milk are called mammary glands.

mantle: The folds of the body wall of a mollusk are called a mantle.

marine: Marine means of, or having to do with the sea.

mollusk: A mollusk is an animal that lives in salt water and has no backbone. Most mollusks have a hard shell that protects their soft bodies.

parasite: A parasite is an animal or plant that lives in or on another animal or plant and gets its food from it.

phytoplankton: Phytoplankton is plankton made up of plants, such as algae.

photosynthesis: The process of making food by changing water and carbon dioxide into sugar using light energy and a substance called chlorophyll, is called photosynthesis.

pen: The inside shell of a squid that is pen-shaped is called a pen.

pincer: The grasping claw of a crab or lobster is called a pincer.

plankton: Very small plants and animals that float in the sea or another body of water are called plankton. It is the basic food for all animals that live in the sea.

polyps: Polyps are small sea animals. Corals are polyps.

radially symmetrical: Radially symmetrical means an even branching out in all directions from a common center, in the form of rays.

retractable proboscis: A retractable proboscis is a tube-like organ that is used for feeling, gathering food, and sucking, and can be pulled back in toward the body.

rhizomes: Rhizomes are creeping plant stems that usually lie flat under the soil and have shoots above and roots below the soil.

salt marsh: A salt marsh is land which has salt water flowing over it at intervals.

scavenger: A scavenger is an animal that feeds off of dead animals or the waste products of living ones.

© 1989 Focus Media, Inc.

segments: Parts of a body that are connected by joints are called segments.

siphon: A tube-like organ in a mollusk used for sucking in or forcing out liquids, is called a siphon .

skate: A skate is a type of ray fish that has a broad, flat, body and a short tail without a spine.

spermaceti: Spermaceti is waxy material that comes from the oil of sea mammals, such as the sperm whale. It is used in making candles, ointments, and makeup.

symbiotic: A symbiotic relationship is where two animals live together usually because they need each other.

tentacles: Tentacles are thin, moveable growths of some animals that are used for feeling, grasping, and moving.

vertebrae: Vertebrae are small bones that make up the backbone.

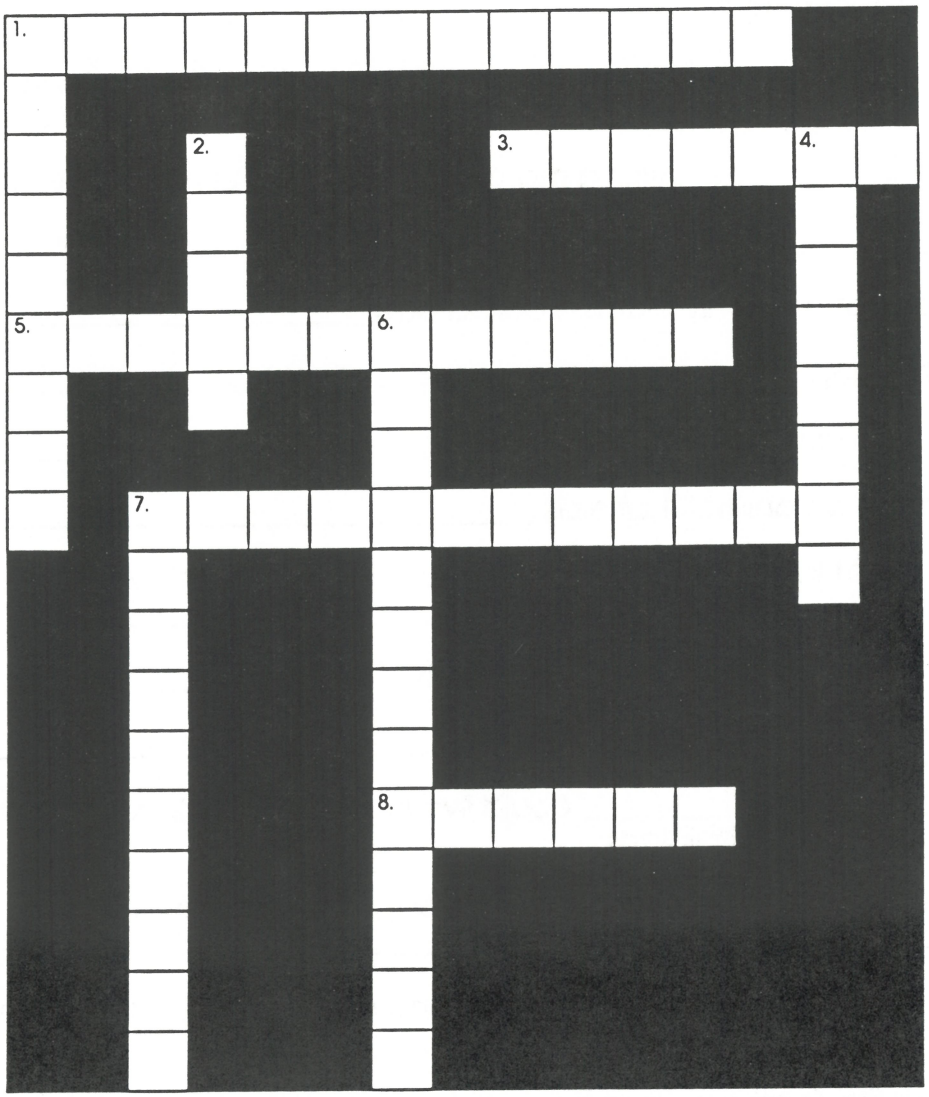
vertebral column: The spine which is made up of small bones, is also called the vertebral column.

zooplankton: Small animals that float in the sea or other bodies of water are called zooplankton.

© 1989 Focus Media, Inc.

Crossword Puzzle

Name _____ Date _____



Across Clues

1. One of the first feathered creatures
3. An animal that looks like a flower
5. The first amphibian
7. An animal with oar-like flippers
8. An animal with eyes that stood out

Down Clues

1. A creature with bony back spikes
2. A mammal that sleeps most of the day
4. A fish that could breathe out of water
6. The bird robber
7. A winged creature with no teeth

© 1989 Focus Media, Inc.

Who Am I?

Animals of the Past

Fact Finder

Name _____ **Date** _____

1. _____was a creature with two pairs of wings and was the largest insect ever to live.
2. An animal whose body is constructed with many chambers in a perfect mathematical proportion is the _____.
3. A _____ was a mammal that lived during the Ice Age.
4. _____was an animal with three horns.
5. An animal that eats only plants is called a(n) _____.
6. The plant eating ankylosaurus is an example of a(n) _____.
7. The scientific name for the tyrant lizard is _____.
8. A carnivore is an animal that eats _____.
9. An animal that lived before most dinosaurs and had a sail-like structure on its back was _____.
10. An animal whose body was covered by two shells was _____.
11. A three-lobed arthropod was the _____.
12. _____ could live in water or on land, and was related to the firstamphibians.
13. An animal that lived in water but laid its eggs on land was the _____.
14. _____ was a flying animal in the Jurassic Period with a 19-inch wingspan, but no feathers.
15. One of the first feathered flying creatures was the _____.
16. Another name for the 8000 pound (3600kg) brontotherium was_____.
17. An animal with two 8-inch fangs for killing its prey was the _____.
18. Stegosaurus was a creature which lived during the _____Period.
19. Tyrannosaurus was a creature which lived during the _____Period.
20. Ichthyosaurus lived during the _____Period.

© 1989 Focus Media, Inc.

What's Different?

Name _____ **Date** _____

In each of the following statements, circle the animal that does not belong.

1. All lived in the Jurassic Period except...
   a. archaeopteryx b. eryops c. stegosaurus
2. All were carnivores except...
   a. armadillo b. ichthyosaurus c. tyrannosaurus
3. All lived in water except...
   a. plesiosaurus b. diplocaulus c. pterodactylus
4. All were herbivores except...
   a. pteranodon b. plateosaurus c. thunder beast
5. All had wings except...
   a. dragonfly b. iguanodon c. pteranodon
6. All lived in the Cretaceous Period except...
   a. triceratops b. iguanodon c. dragonfly
7. All lived in the Triassic Period except...
   a. ichthyosaurus b. plateosaurus c. stegosaurus
8. All were reptiles except...
   a. stegosaurus b. saber-tooth c. tyrannosaurus
9. All lived in the Tertiary Period except...
   a. trilobite b. dawn horse c. ground sloth
10. All lived in the Devonian Period except...
    a. tyrannosaurus b. ray-fin c. ichthyostega

© 1989 Focus Media, Inc.

11. All were amphibians except...

    a. diplocaulus b. eryops c. nautilus

12. All were mammals except...

    a. thunder beast b. brachiopod c. mammoth

13. All had shelled bodies except...

    a. brachiopod b. nautilus c. sabor-tooth

14. All lived in the Quaternary Period except...

    a. armored fish b. woolly rhino c. mammoth

15. All were carnivores except...

    a. terrible fish b. saber-tooth c. triceratops

16. All were herbivores except...

    a. dragonfly b. mammoth c. dawn horse

17. All were mammals except...

    a. armadillo b. early whale c. plesiosaurus

18. All had teeth except...

    a. tyrannosaurus b. brachiopod c. mammoth

19. All lived in water except...

    a. dimetrodon b. trilobite c. brachiopod

20. All lived in the Cretaceous Period except...

    a. tyrannosaurus b. ornitholestes c. ankylosaurus

© 1989 Focus Media, Inc.

Pronunciation Key

Ankylosaurus	an-KY-lo-sawr-us
Archaeopteryx	ark-ee-OP-tah-ricks
Brachiopod	BRAY-kee-oh-pod
Corythosaurus	caw-rith-oh-SAWR-us
Diatryma	die-uh-TREE-muh
Dimetrodon	die-MET-row-dahn
Diplocaulus	dip-lo-CAWL-us
Eryops	AIR-ee-ops
Ichthyosaurus	ik-thee-oh-SAWR-us
Ichthyostega	ik-thee-oh-STAY-gah
Iguanodon	ig-WAN-o-dahn
Nautilus	NAW-till-us
Ornitholestes	or-nith-oh-LESS-teez
Plateosaurus	plat-e-o-SAWR-us
Plesiosaurus	play-see-oh-SAWR-us
Pteranodon	ter-AN-a-dahn
Pterodactylus	ter-o-DAK-til-us
Stegosaurus	steg-o-SAWR-us
Struthiomimus	strooth-ee-o-MIME-us
Triceratops	try-SER-a-tops
Trilobite	TRY-lo-bite
Tyrannosaurus	tir-an-a-SAWR-us

© 1989 Focus Media, Inc.

Glossary

air bladder: An air bladder is a structure that can hold air or other gases.

amphibian: An animal that spends part of its life in water and part of its life on land is called an amphibian.

antlers: Horns which are branch-like are called antlers.

arthropod: An animal with no spine, whose body has separate segments or parts, is an arthropod.

Aves: In zoology, *Aves* is the class of birds.

braincase: A braincase consists of the bones surrounding the brain; the skull.

canines: Canines are sharp-pointed teeth on either side of the upper jaw and lower jaw.

carnivore: A carnivore is an animal that eats meat.

coiled: Coiled means turned or wound around a central spot.

conifers: Conifers are plants that stay green all year.

crested: Crested means coming to a kind of point on top.

curling: Curling means going into a spiral or curved shape.

fangs: Long, sharp, pointed, curved teeth are called fangs.

filtering: Filtering means allowing some things to pass through while some things are held back.

fivefold: Anything repeated five times or in five places is fivefold.

forearms: The front part of the arms are the forearms.

forelimbs: Another word for front legs is forelimbs.

fused: When something is fused together it has grown together to form one piece.

herbivore: An animal that eats only plants is called a herbivore.

hydrofoil: A structure whose purpose is to push against water is called a hydrofoil.

knuckles: Knuckles are joints between fingers or toes.

lobed: Something that has separate sections is lobed.

© 1989 Focus Media, Inc.

microorganisms: Microorganisms are living things which are so small, they can only be seen with a microscope.

microscopic: Something is microscopic when it is so small that it can only be seen with a microscope.

modified: Modified means changed.

molars: Molars are teeth used for grinding food.

nasal passage: A nasal passage is a tube-like structure that allows air to pass in and out.

nerve: A structure in the body of an animal that carries messages or feelings from one part of the animal's body to another part of the body, is called a nerve.

phylum: A phylum is a large group of animal families with similar characteristics.

prey: Animals that are hunted as food by other animals, are prey.

primitive: Primitive describes something that is the first of its kind before any development or improvement takes place.

propulsion: Propulsion is a moving forward.

scavenge: To scavenge means to look for things that were already dead or not wanted by other animals.

symmetry: Symmetry is when something is exactly the same on both sides or exactly the same all around.

tentacles: Tube-like parts that extend away from the animal's body are called tentacles.

warm-blooded: An animal that can regulate its own body temperature regardless of the environment is warm-blooded. Humans are warm-blooded.

wingspan: The distance measured from one wing tip to the other wing tip when the wings are stretched out is the wingspan.

© 1989 Focus Media, Inc.

Focus Media, Inc. • 839 Stewart Avenue • Garden City • NY 11530